

NEUROPATHY

The New Science of Drugless Healing
Amplly Illustrated and Explained

EMBRACING

OPHTHALMOLOGY, OSTEOPATHY, CHIROPRACTIC SCIENCE, SUGGES-
TIVE THERAPEUTICS, MAGNETISM, INSTRUCTIONS
ON DIET, DEEP BREATHING,
BATHING ETC.

*Advice to Mothers—How to Care for Children—Physical Manipulations to
Cure Chronic and Acute Diseases.*

*Many Invaluable Recipes for Home Use—Instructions How to Cure Dis-
eases without Medicine, and Some Conditions where Certain
Domestic Remedies are Useful.*

BY

A. P. DAVIS, M. D., OPH. D., N. D., C. P., D. O.

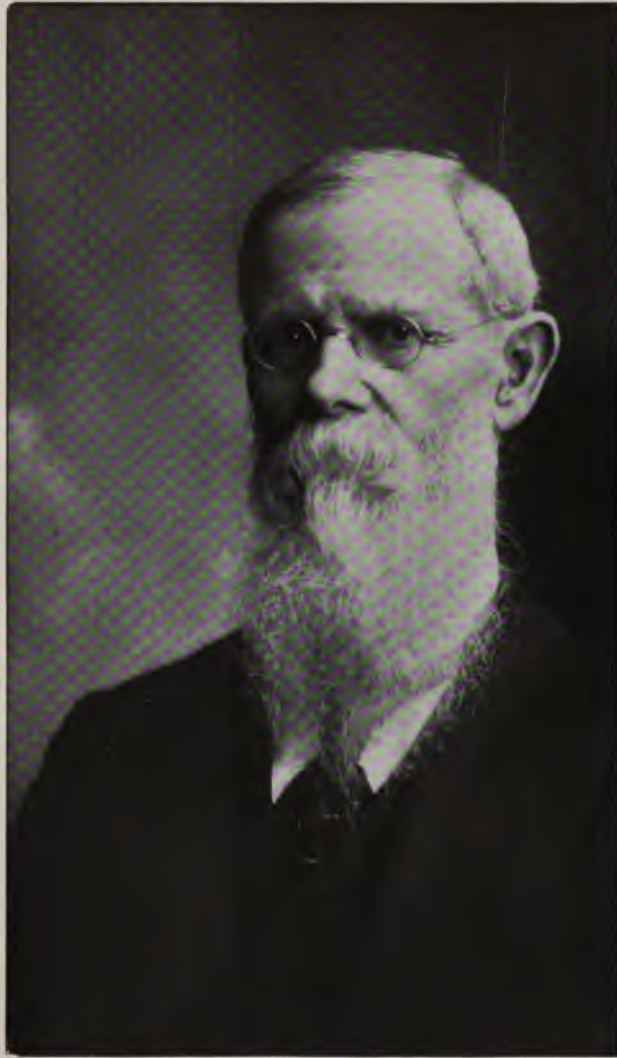
Author of Osteopathy Illustrated and Neuro-Ophthalmology or Neurology,

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A. P. Davis, M.

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THIS BOOK IS DEDICATED TO

The afflicted ; to suffering humanity ; to honest searchers after the best means to arrest human suffering ; to those who desire to assist in lifting the dark cloud of prejudice, ignorance, and traditional superstition from the human race ; to those who are willing to stay the tide which drowns men and women in the maelstrom of delusion ; to free humanity from the destructive, pernicious influence of drugs and their baneful effects in all conditions of life, and start mankind upward and into a wholesome atmosphere of truth, something which can be *relied upon to relieve pain, stop fever, and arrest the ravages of disease rationally*, by

THE AUTHOR.

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PREFACE.

In presenting this book to the public, we have no apology to offer. The *book contains matter not found elsewhere, hence needed*. The subjects presented are replete with most valuable information.

Neuropathy, the title of the book, embraces the *Entire Nervous System—its freedom from Pressure, Waste and Irritation*.

Neuropathy is the discovery of the author of this volume.

Neuropathy is applied in the treatment of all conditions wherein the nervous system is involved.

Uniting the two forces—the Positive and the Negative—to harmonize the Acid and the Alkaline Secretions, which cause disease, is shown in this book. This is the secret of spinal adjustments in the cure of diseases, and is plainly shown and explained herein.

Chiropractic Science rationally explained, and the "Luxation Fad" *eliminated*, and shown why. Much new matter about this science is added and rationally explained.

Osteopathy: The cream of that science is herein fully shown and amply illustrated and made so plain that any one can learn it.

Ophthalmology: In this department the eye, with its anatomy and refractive power, and its *uses* and *abuses* specially shown. The best method of conserving *Nerve Power* shown, and how to *arrest nerve-waste* through the eyes—by the proper correction of refraction.

PREFACE.

This book embraces three of the greatest modern sciences. It fully illustrates and explains every means necessary to relieve human ills mechanically, rationally, scientifically and successfully.

The department which relates to "*How to Bathe, Breathe and Eat,*" will be found of incalculable value to everybody.

The Domestic Department is replete with many valuable hints. The how to *use salt, lemon juice, kerosene oil and Epsom Salts,* will be a boon to every one who desires the simpler methods of treatment by *home remedies,* for they will be extremely useful to know about and how to use to relieve many pains, and *save expense and much suffering.* Many *valuable recipes* are included in this department: Antidotes to Poisons; How to Cure Appendicitis; Remove Gall Stones; *Cure Snake Bites,* and many other poisons as well.

The *Advice to Mothers* is exceedingly interesting and can not fail to be of *immense interest and untold value to every mother* in the land. Besides all of the above, there are *many other features* in this book which *apply to the betterment of humanity every way.* We heartily commend it to the afflicted everywhere as a book *of the times* and wholly *up-to-date,* and the result of a long and *arduous study* by

THE AUTHOR.

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INTRODUCTION.

It is not so much a matter of fame on my part, nor the glory of popular praise, in presenting this book to the world as an individual production, as it is to present facts. Every man has more or less pride in himself, who amounts to anything as a leader of the people or who wishes to aspire to a promulgator of a great thought, and I hope to be pardoned for any seeming presumption in presenting this volume for consideration. No subject claims audience of so large a number of people as that which concerns their personal welfare, and this being of that nature—the physical welfare of the race—we hope that the principles laid down and elucidated herein will receive careful consideration, investigation, and after trial, the approval of every one interested in health. It would be presumptuous on the part of the author to claim perfection, but we have studied the principles involved most carefully, and hope that we have consummated much that will be invaluable to the reader, and be in some measure a means of showing to the world, in a clear, concise form, the peculiar marvelousness and untold benefits of this great science, so that it may indeed be a blessing to mankind.

Our only apology for offering this volume is that the subject has not been clearly presented to the public, nor to the profession in such a manner as to be understood. The sketches sent forth through journals have scarcely indexed the meaning of, nor the science in a manner that brought out

anything more than ridicule and repugnance. This science deserves the closest scrutiny and the most searching investigation, for it is surely worthy, and will be the leading science of healing at no distant day. Our illustrations will be most interesting to the reader, in that they exhibit fully the application of the principle in detail so clearly that the science stands out to view in the clearest light possible, and at once attracts intense attention. Special pains have been taken to prepare this series of manipulations so as to be easily understood and used by all persons who carefully study the philosophy involved.

THOUGHTS FOR SPECIAL CONSIDERATION.

It is not the design of this work to embrace all other sciences and specialties, in order to make a show of wisdom—our sole object being to present the reasons for the application of this science, and to demonstrate its place among other means of healing. If the reader will carefully survey the premises, investigate the philosophy and note the results, a just estimate of the value of the science may be placed on it, and its proper place assigned for it.

Unobstructed circulation of fluids to and from the heart, in all parts of the body, and uniting the forces and removing the pressure, constitute the basic principles of this philosophy, and the means of promoting these ends is the only object of this book.

Disease, according to the common acceptation of the term, being only the product of impeded circulation, the desideratum in all of the manipulations, moves and adjustments shown, illustrated and explained in this work, will be conceded by the careful reader who desires to know. There is no secret, arcane abstruseness aimed at, but the practical

uses and results of the science to ameliorate suffering humanity, to set free what is and has been bound, "lo, these many years," not by word only, but through the means God has given us.

The field of surgery, gynecology, obstetrics and other departments of the healing art are not considered in detail, nor is it the object of this treatise to embrace, but the principles illustrated will be alike useful to the one as the other. When it is considered that *obstruction* causes a larger per cent. of pathological conditions than anything else, and all other things combined, the importance of the thought we have labored to impress on the mind of the reader, will be realized.

The various methods recommended and shown will be found adequate, properly applied, to afford much satisfaction, great relief, many cures thought to be beyond the power of known remedies to reach.

It is as much of an impossibility to send communications over electric wires without continuity of contact as it is to cure disease without freedom of communication of terminal end nerve footlets or freedom of the circulation of the fluids of the body; and the reason that Osteopathy shows up so *brilliantly*, is because it succeeds in taking off the pressure and permits vital fluids to move on. Co-ordination in the physical body is as essential as Faith in the spiritual body. We are not dealing in uncertainties, if we understand ourselves, nor do we need to conjecture results, for they follow with as much assurance as effect follows cause. This science, then, becomes a *necessity* in the curriculum of the *healing art*. Those who have had most experience with Osteopathy are the most ardently impressed in its favor. It wears favorably with acquaintance.

BIOGRAPHICAL SKETCH OF ANDREW P. DAVIS, M.D.

The subject of this sketch was born in Allegheny County, New York, on the tenth day of March, A. D. 1835, of religious parents. The paternal side was of the Scotch and Welsh descent and the maternal side of Irish extraction, very near the original, his grandparents being quite prominent factors in the Revolutionary War.

His energy and tenacity he derived largely from the paternal side, and his finer qualities from the maternal side — a most remarkable combination of character for versatility, embracing all the qualities of both the sturdy and the refined. Brought up amidst ruralistic influences during the first years of boyhood, he grew strong and vigilant; having all of his faculties exercised, he became early fitted for the hardships of life. His parents emigrated from the place of his birth when the subject was but four years old, and settled in Indiana. His father, being a physician of no mean attainments, followed his profession until he died of flux, in middle age, not having passed fifty years. This event changed the environments of the author of this book, and threw around him strange and peculiar circumstances of personal responsibility.

His father's estate being handled by individuals of perverted acquisitiveness, managed to deprive the heirs of a father's legacy, and the struggle for existence dated from the demise of his devoted father. His early education consisted of what the schools provided, until later on he was educated in Wabash College. Then, married at the early age of twenty, his responsibilities increased, but his energies never tired nor flagged, but by dint of courage and a mind which knew no defeat, pressed onward and upward

through all the medical colleges of his day; and he has never ceased to add to his collegiate lore all that time has allotted him, having studied every method known to the present date along the lines of his chosen profession. He has had about forty years of personal experience in the practice of medicine. His first course was under the regular practice, and later in the homeopathic school of medicine, having diplomas from these two schools, as well as from many others along special lines, all of which have contributed to the make-up of what this book is composed. It has always been the motto of the author to know the truth of any system, and to eliminate the errors. This volume is the product of many ripe reflections from the long years of assiduous investigation of the author. It speaks for itself, and needs only to be studied to be appreciated for its worth to suffering humanity, for it contains the ripe fruitage of deep thought and experience.

F. L. ROWE.

SOME SPECIAL DIRECTIONS AS TO THE MANIPULATIONS IN OSTEOPATHY.

If the manipulations explained in Neuropathy be understood and properly applied, there will be but little use of the osteopathic manipulations in very many conditions. There is such a far-reaching effect of the spinal treatment, as performed by adept Neuropaths, that but few movements as shown in Osteopathy, are necessary to accomplish the purposes intended through manipulations; and yet, if the student will closely study the directions for each manipulation, as shown in the Osteopathic Department, great benefit will be derived through their use, and the two will include and embrace everything necessary in the manipulatory department, physically, to alleviate any condition possible to be alleviated through Neuropathy, Chiropractic, or Osteopathic science.

The relief of nerve pressure and the freedom of the circulation of all of the fluids of the body, and the uniting of the *two forces*, may be effected by the application of the instructions in each department; and when one becomes familiar with all of them, no difficulty need be experienced in applying just what treatment is necessary in any case.

When the Eye Department is considered and applied where indicated, one need not fail to know how to remedy any and all conditions which are to be found in functional, human ills. The *recipes*, given for various diseases, are useful in many cases as adjuvants to the physical manipulations, and will be appreciated greatly by many people, for they are the best known for the things recommended and will suffice most admirably.

The study of the contents of this book will be interesting to those who need its instruction, and to know how to apply the

various means to relieve
information that but fe

We commend the
of its merits and as r
mentioned in it, and we
other system known to

DESCRIPTION OF PLATES.

PLATES NO. I.a AND I.b.

Place the patient on the table, or bed, on the back, all the muscles limp as possible, neck bare of clothing, ties, etc. Put both hands, fingers touching at the spines of vertebrae, hands at the side of the neck, head of patient well up to the head of table; raise the neck with both hands, letting the fore-fingers pull hardest, so that the head will incline to droop somewhat, pressing the person against the top of the head of patient, and when the neck is well bent and stretched upwards, move backward from head of the patient yourself, raising the fingers next to the occiput so as to level the head, and let it down on the table. This move should be done two or more times. The object of this move is to stretch the neck muscles, stimulate the general circulation, and thereby start dormant conditions of all of the fluids in that region, arouse the vasomotor nerves, regulating the caliber of all of the blood vessels in the body; and determines normal or abnormal contour of the vertebrae themselves, the softness or rigidity of the various muscles of the neck, condition of the venous and lymphatic vessels, glands, etc.

PLATE NO. II.

Place the *heel* of each hand on each side of the head of the patient, on the mastoid portion of it, behind the ears, putting the fingers as near together as may be; drop the fingers of one hand to the junction of the occiput and neck; now roll the head over on that hand by pressing with the heel of the other hand, pressing at the same time with the palm of the fingers against the side of the neck, inclining to pull the finger ends upward, and enforcing that move by the pressure of the palm

of the other hand, or rather the heel of the hand against the side of the head, back of the ear (as seen in the plate). Continue these moves several times, moving the fingers on the sides of the neck up and down over the muscles, catching fingers at a new point on the neck each turn of the head, with the fingers of the hand underneath the side of head and the neck. The fingers of the hand that rolls the head over on the other hand need not be pressing on the neck as the heel of the said hand rolls the head over on the opposite hand, but may be lifted up therefrom in an easy, graceful curve, but draw down when pressure is to be made on the neck of that side. The object of this move, or these moves, is to free the circulation of the blood and other fluids in all of the muscles of the neck, removing any and all rigidity, contraction of muscles, etc.

PLATE NO. III.

Place the hand under the neck, fingers ending near mastoid process of occipital on opposite side, other hand under chin of patient; pull easily, firmly and steadily in a direct line lengthwise until you perceive that the body is moved enough to move the feet of the patient, and, holding the hands and body taut, at the same time turning the head on toward finger ends of hand on back of head, pressing moderately with finger ends, and before slackening hold turn head till straight with body; then let go. Change the hands and repeat same process on opposite side of head. This, you perceive stretches the neck muscles, and cervical vertebrae as well thoroughly.

The stretching of the *spine* is done as follows: An assistant takes hold of the feet, and the operator takes hold of the patient under, or by the arms or wrists, and gentle and steady extension is made. If patient lies on face, a second assistant may be of service in adjusting spine for any deviations found, such as curvature, contracted muscles along spine, atrophied, shrunken or affected muscular structure.

This treatment is greatly beneficial in all spinal affections, in a large variety of pains, lameness, rheumatic or neuralgic, sciatica, lumbago, etc. It relieves spinal congestion in cerebro-spinal meningitis. The stretching of the *spinal cord* will be advisable for a great many affections, and properly performed, frequently produces the most marvelous results imaginable. Lameness that has existed for years frequently yields at once. Remember that *the important thing to do* is to *take off the pressure*. Freedom's holy influence blesses mankind physically, as well as morally, *spiritually*. "*Freedom!*"

PLATE IV.

With the tips of the fingers of both hands placed near the cervical vertebrae, hands at the sides of the neck, pressing gently against the neck with ends of the fingers, move the hands rapidly in such a way as to move the muscles of the side and back of the neck upwards, downwards and sidewise, vibrating, for several successive moves.

PLATE V.

Place the fingers (one or more) at the angle of the jaw; have the patient open the mouth widely; at the instant the mouth is opened draw the fingers up firmly to the side of the head, back of the ear, stretching the skin and adjacent and subjacent tissues at the same time; and as the patient closes the mouth, loosen the pressure of the fingers. Do this two or three times, being careful not to produce pain by holding the fingers in position as the jaw is closing.

PLATES VI.*a* AND VI.*b*.

The ear movement is made as follows: Place the end of the forefinger palmar surface on the *Tragus* (the little protuberance just below and in front of the meatus-auditorius externus), the ear being held between first and second fingers; move them quite vigorously up and down several times, then press them backwards with a steady but rather sudden jerk, and revolve the integument with the whole ear several times.

F

Place the fingers, th
with an up and down or r
and around in all directi
successive movements, :
thumbs on the forehead
of it, upwards and down

P

This movement is m
the thumbs on either sid
and outwards over the ey
two or three times, with

F

Put the thumb on c
side, compress slightly,
length of nose, pulling :
rapidly for several succes

F

Put thumb and ind
lachrymale at inner cantl
ger and thumb in posit
sides of the nose with a
them together so as not
eyes. Two or three vige

F

This move is made
of the alae of the nose, a
letting the thumbs slid
under edge of the mala
bones. Repeat the mov

PLATE XI.

Introduce the forefinger of each hand into the nostrils and place the thumbs on outside; press them together, then pull nostrils outward (straight), stretching moderately so as to dilate the sphincter alae. This is one of the treatments for catarrh.

PLATE XII.

The movements of the muscles of the neck are shown in this plate, and being important, it is essential that they be well understood. This movement, or the movements, are made by standing at the side of the patient, the operator placing the hand on the forehead of the patient, the other hand on the side of the neck, fingers close to the cervical vertebrae, but not beyond the vertebrae of the side of the neck the hand is placed, the fingers forming a gentle curve, and the tips pressing evenly and vertically on neck; and now, with a rolling motion of the head, done by the use of the hand of the operator, on forehead, pushing forehead from him, and at the same time pulling the other hand toward himself, the operator being careful not to let the fingers slip over the skin, but pulling the skin and deeper structures with the fingers, using sufficient pressure to do so, and yet not hard enough to be painful or uncomfortable to the patient. The hand should course up and down on the neck, being particular to manipulate all of the side of the neck with that sort of a motion; then change sides of table; get around on the other side and go through the same process as on side left. The moves should cover every portion of the neck, and should be thoroughly done so as to reduce all of the rigidity that exists in the neck muscles at one sitting, if possible.

PLATE XIII.

THE RAISING OF THE CLAVICLES.

Standing at the side of the patient, place the arm of patient at the side of the body, flexed at elbow, catch hold of

arm at elbow with hand, right arm of patient with right arm of operator, push the arm upwards gently. This pushes the clavicle upwards, and away from the first rib somewhat; now place the fingers of the other hand between the neck and clavicle, gently pull it outwards and at the same time raise the arm up to a level with the shoulder, keeping it on the level with the body, sliding it up on the table to that height; then let go with both hands, as you have the clavicle sufficiently raised for one time. This is the manner of raising the clavicle while patient is lying on the back of the operating table.

PLATES XIV.*a* AND XIV.*b*.

THE MOVEMENT OF THE ARM WHILE THE PATIENT LIES ON THE TABLE AND ON THE SIDE.

Standing at the side of the table, patient lying with face toward operator, relaxing as much as possible every muscle in the body, the patient is taken hold of by the operator, by the wrist, the fleshy part of the wrist next to the palmer surface of the operator, the forefinger extending between the thumb and forefinger of the patient, which gives secure and easy control of the movements to be made by the operator.

The hand of the operator now should be placed with the fingers somewhat gently curved, the pulps of the fingers near the spinous processes of the dorsal region, beginning midway between scapulae and on the side of spines next to operator, keeping patient on the side, leaning a little from the operator, close to edge of the operating table, and the operation should be at the side of the table, pretty nearly opposite the patient's shoulders, with foot extended beyond the head of the table, and the other foot placed so as to brace the body firmly and comfortably. Now extend the arm upward loosely to the side of the head, trying its natural position to the side of the head without straining, having hold of hand or hand and wrist as aforementioned, and the hand as before stated near spines of dorsal vertebrae; pressing gently two moves are made at once, simultaneously—the arm is extended, and at the

same moment there is sudden pressure made in the back, then the hand on the back should be firmly held in place while the patient's elbow is bent, flexed, upon itself, and suddenly brought back, with the hand closed around the wrist, to the side, over the arm of the operator (see Plate XIV.*b*) with a sudden movement. This sort of a movement is to be repeated a number of times; the operator moving the fingers down the side of the dorsal vertebrae, an inch or two at a time, so as to cover all the space in the different moves as far down the back as the tenth or twelfth dorsal vertebra. This may be repeated two or three times. This should be done on both sides the same way. This constitutes all of the dorsal treatment from the arm movement. The reader will not confound this movement with other dorsal treatments, remembering that this is the arm movement on the table for the back treatment. This move is an important one, and should be thoroughly understood, for upon the right kind of execution of it depends important results. These movements will be often referred to in the body of this work.

PLATE XV.

NECK MOVEMENT.

Patient lying on the back, the operator places his hand under neck, finger ends on opposite side of cervical vertebrae, pressing gently on muscular structure, and holding fingers in that position, with other hand on the forehead of the patient, rotates it from him, toward ends of fingers of hand under neck, thus pushing muscles away from their moorings, as it were, continuing this process from base of skull clear down the cervical vertebrae to the shoulders, or first dorsal vertebra. This is to be done on both sides of the neck, changing hands, of course. Notice position in this plate.

PLATE XVI.

FOR PAINS IN THE BACK, DIARRHOEA, ETC.

The patient being seated on a stool, the operator, seated behind on another stool, places hands under arms of patient

in such a manner as to include the shoulders, and placing the knees on either side of the spinous processes, gently draws the shoulders backward, and rolls the body of patient either way, using his knees as pivotal points against sides of spines, in the lumbar region, gradually pulling body upward as the body of operator is inclined backward. This stimulates the nervous system in that region and stretches the lumbar muscles, takes off the pressure, and relieves distress. This move may be utilized in the treatment of diarrhoea, flux, kidney troubles, by placing the knees in the proper position on the sides of vertebrae, in lower dorsal and lumbar region. This will be fully explained elsewhere in this book.

PLATES XVII. AND XVIII.

THE MANIPULATION OF THE HIP JOINT.

The patient lying on the back, the operator takes hold of the ankle, flexes the leg, presses it against or toward the abdomen, rotates it to ascertain whether the articulation is normal, adducting and abducting it as well as flexing and extending it. Then hold the leg at the knee in either one of the methods desired, flex the thigh up on or toward the abdomen, placing the fingers of the other hand just above the sacroiliac junction, pressing firmly with the ends of the fingers, and rotate the knee outward, downward and backward, repeating this process several times, bringing the fingers down a line half way between the ischium and the great trochanter, following the course of the great sciatic nerve as nearly as possible. The pressure may be modified according to effect desired. The various methods of holding the leg may be seen in the plates. The various methods of reducing luxations of the hip joint, described in books on the science of surgery, are familiar to surgeons, and, being duly explained in this book, need not be mentioned here. But the adduction and abduction are frequently used in the various muscular contractures in the hips and thighs which cause pain, rheumatism and kindred affections, such as neuralgia,

varicose veins, ulcers, etc., that will not down of their own accord, but will recover if the proper manipulations of the hip joint are made. We have other movements of the hips that demand our special attention.

PLATE XIX.

The patient lying on the back, the operator should take hold of the ankle, placing the other hand below the knee; flex the leg upon the thigh and press the thigh well toward the abdomen; raise the foot a little; and press the thigh further toward the abdomen, and while thus taut, hold it quite firmly with the hand just below the knee, and with the hand holding the ankle move the foot from the other leg, describing about an eighth of a circle, moving it backward and forward a few times; this vibrates the hip and knee joints.

PLATE XX.

With the hand holding the ankle, and the other one holding the leg below the knee joint, and the leg flexed on the thigh, and the thigh on the abdomen, and held there firmly, pass the hand from below the knee above the knee, as in Plate XVII., and gently push the knee toward its fellow over the other thigh, at the same time bringing the ankle outward, and as the leg is brought to a straight line letting the hand above the knee come down on it as it comes to a level with the other limb. This last move should be made in a quick and rotary manner, coming down suddenly with the leg on the table.

PLATE XXI.

This plate is the finishing of Plate XX. This manipulation should be gone through with two or three times each treatment.

PLATE XXII.

The stretching of the adductor muscles is done in the following manner: Take hold of the ankle with one hand, flex the leg upon the thigh, turn knee outward, foot at right

angles with other leg, knee pressed down with other hand, the hand above the knee, pressing firmly and steadily, continuously, while the hand holding the ankle draws the leg down with a quick jerk to a straight line, and the forefingers of the other hand pressing against the side of the leg thus extended so as to suddenly go against the side of the leg as it stops, with a sudden stop. This gently jerks the hip joint, as well as the knee joint, with a slight shock.

PLATE XXIII.

This plate shows the conclusion of Plate XXII. very perfectly, with the hand beside the leg, and just above the knee.

PLATE XXIV.

VARICOSE VEINS. VARICOSE ULCER TREATMENT.

Place patient on the back, on operating table, take hold of the leg just below the knee, flex the leg on the thigh, and with the other hand take hold of the thigh about two inches below the bend of the hip joint, fingers about the middle of the front of thigh, fingers forming a gentle curve, gently grasping the muscular structure; hold firmly and at the same time flex the thigh more against the abdomen, directing the knee toward the opposite shoulder of the patient in a slightly outward circular rotary movement, and at the same instant squeeze the fingers down on and inclosing the front part of thigh and pulling the elbow slightly backward and the wrist with an outward, backward, circular move, repeating these moves several times. This is for the purpose of freeing the veins in that region, especially the saphenous, which empties the blood from the deeper veins of the thigh into the femoral vein. The closure of this vein (saphenous) causes that condition called varicose veins of the leg.

PLATE XXV.

VARICOSE VEIN TREATMENT CONTINUED.

Letting the foot rest on the table, knee at right angle,

patient on the back, take hold of the side of knee with one hand, the other hand with fingers slightly curved around on and under inside of the muscles low down on thigh, pull the ends of fingers against the muscles and at the same time push the leg and knee inward toward other leg, carefully moving all the muscles of the inside of the thigh as far up as the adductor brevis, and then the move as shown in Plate XXIV. may be repeated in the treatment. This is *the* most important movement in the treatment for varicose veins, for stoppage of the blood in the deeper veins and the saphenous vein means trouble below in leg.

PLATE XXVI.

A FURTHER TREATMENT OF THE LIMB TO FREE THE VENOUS CIRCULATION, WARM THE FEET AND REMOVE OBSTRUCTIONS TO RETURN CIRCULATION.

The patient lying on the back, catch hold of the ankle, other hand placing thumb resting on tibia about the insertion of quadriceps extensor muscle, fingers of the hand under head and back of fibula, grasping that bone, using some compression; flex the leg on the thigh several times, bring considerable pressure to bear each time, and lower the fingers into the posterior peroneal space, using the leg as a lever to squeeze the muscular tissue and deeper structures in that region, extending and flexing the leg repeatedly. This is an excellent move to aid the return circulation of the fluids.

PLATE XXVII.

THE METHOD USED TO WARM THE FEET.

The patient lying on the back, take hold of the ankle with one hand, place the other hand above the knee on the lower end of thigh, raise the leg with hand holding ankle, press firmly with other hand above knee, stretching all of the back muscles of the leg. Let the knee bend a little, and bring the pressure against the thigh with other hand suddenly, though gently, several times, and the feet warm up as if by magic. A still better way to increase the circulation of the

blood in the leg and foot is to place the leg on the shoulder, lock both hands around the thigh just above the knee, moving up so as to let the leg flex at the knee, and spring the hands gently towards operator, bringing the leg straight with a sudden jerk—not strong, but easily, as prudence may dictate in each given case. This move may be made several times at one sitting, and no treatment will bring better results for cold feet. It will be referred to frequently for various other affections.

PLATE XXVIII.

This move should not be ignored, for it has its uses, and is frequently needed. The operator should take hold of the tendo achilles with one hand, holding it in such a manner as that the ankle may be firmly fixed, catching hold of the foot with the other hand, more nearly or around the toes, placing his shoulder or chest against the inner side of the forearm to steady his moves; now gently push the toes and metatarsal bones toward the front part of the tibia, pulling firmly in heel, counterbalancing the pressure made by the other hand. This stretches the muscular fibers of the back of the leg and lengthens them, equalizing the muscular strength of all the muscles of the leg. While the hands are thus holding the foot, rotation may be made to adjust any displacements of bones existing in the foot or ankle.

PLATE XXIX.

OUTSIDE OF LEG AND THIGH TREATMENT.

Place the patient on the back, flex the leg opposite, take hold of the knee, inside of opposite side of patient (to operator), and pressing knee outward, pulling inward with hand holding muscles of thigh, following course of sciatic nerve—that is, half way between the ischium and the great trochanter, pulling the muscles quite firmly, going over the parts two or more times. This treatment not only frees the muscular tissue on the outside of the thigh, but stretches the muscles on the inside of thigh, and in cases of sciatica or rheu

matism, myalgia or diseases resulting from contracted muscles and sluggish circulation in that part of the body, is what should be done.

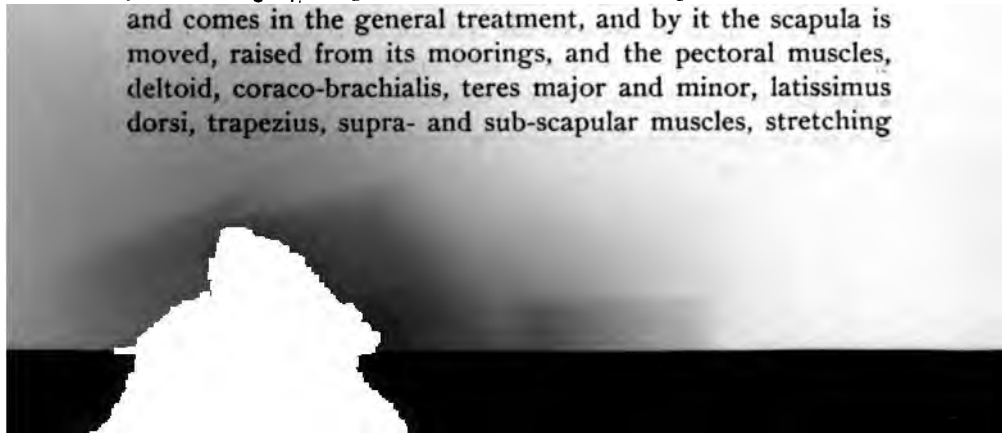
PLATE XXX.

FOR THE EXPANSION OF THE CHEST, RELIEVING MANY AFFECTIONS OF THE VISCERA IN CHEST.

The patient lying on the back, two persons, one on each side of table, take hold of the wrist of patient, with the other hands placed near the sides of spinous processes, pressing firmly, beginning about the first dorsal vertebrae (each operator on his own side of the body next to him), with the arm of patient stretched strongly upwards and outward, as well as backwards and downwards, using the arms as levers and the ends of fingers as fulcrums, and at the same time having the patient inhale deeply; the arms are returned to the sides of patient with a sudden push and down on table to side of patient. This process should be repeated, moving the hand of operator down spine an inch or two each time the operation is repeated, going down as low as the tenth dorsal vertebra. The angles may vary from a right angle to a vertical, pulling up to the side of the head. If there is no assistant, one operator may treat one side at a time. This is a most excellent way to expand the chest, and the patient invariably feels better. Care should be exercised in all the moves made, and due regard to the comfort of the patient. The various manipulations should be made with the view to benefit, and not to exhibit skill simply for the sake of praise as a mechanic, but for the good of the one operated upon. Disgrace always follows an awkward manipulator; justly, too.

PLATE XXXI.

This plate represents the arm and scapular movement, and comes in the general treatment, and by it the scapula is moved, raised from its moorings, and the pectoral muscles, deltoid, coraco-brachialis, teres major and minor, latissimus dorsi, trapezius, supra- and sub-scapular muscles, stretching



muscular fiber and aiding in promoting free circulation of blood and other fluids in muscles and tissue involved in them. The patient lying on the side, the operator takes hold of the elbow with one hand, and puts the end of his fingers of the other hand at the upper and posterior border of the scapula, pushes the elbow backward, and edging the fingers of the other hand under the edge of the scapula, moving fingers downward at each move of the elbow backwards, until lower edge of scapula is reached.

PLATE XXXII.

STRETCHING THE DIAPHRAGM.

Place the patient on the back on a table, hands down to the sides, limp, relaxed; the operator, standing at the head of the patient, reaches arms down to the lower edge of the chest, in front and on either side of sternum, placing fingers of both hands at the junction of ribs and abdomen, as if to take hold of ribs, and while holding there require the patient to take a deep inspiration, expanding and drawing up the chest as well as the abdominal muscles; then have patient let go—that is, cease to hold—suddenly (this relaxes all of the muscles made taut by the inhalation), and just at that instant put the ends of the fingers under lower edge of ribs and pull steadily upwards and outwards, using moderate strength. This surely does the work effectually. It is a means of overcoming much of the constriction around the waist caused by heavy skirts in females, and tight lacing of former years (of course, we have no tight lacing now!), and freeing the lower tension and constriction caused by contracted abdominal muscles.

PLATE XXXIII.

TREATMENT OF THE LIVER.

The patient should be in a recumbent position, lying on the back, a little inclined to the left side, the operator on the left side of patient. right hand with fingers somewhat curved, ends placed on right side of spinous processes between the

sixth and the tenth dorsal vertebra, with left hand (the heel of it) or the ends of fingers placed on abdomen at or under edge of the ribs on right side of patient, and while pulling with the right hand, he presses ends of fingers of left hand against liver, circling the entire edge of that side of the body, having regard to the susceptibility of the patient as regards pressure. The kneading of the liver should be done gently, but thoroughly.

PLATE XXXIV.

TREATMENT FOR CONSTIPATION.

After the liver has been treated as directed in Plate XXXIII., while the right hand is in position as shown in that plate, and the patient on the back, let the operator place the fingers of the left hand on the left side of the abdomen, down in the region of the sigmoid flexure, pressing gently with the fingers, and at the same time pull gently with the right hand against the right side in the region of the liver, moving the fingers of the left hand upwards, along the course of the descending colon, pressing at short intervals as the other hand is drawing against the side and liver.

PLATE XXXV.

This plate shows the manner of percussion of the abdomen with the finger ends all gathered in a bunch, each hand. The object of this treatment is to arouse peristalsis of the intestines; and it often does it while patient is receiving it to that of desire to empty the bowels at once. The patient lying on the back, abdominal muscles relaxed, begin with one hand at the iliocaecal valve region of the abdomen, begin the tapping and alternate the taps with the ends of the fingers, up, ascending colon to the hepatic flexure, then across abdomen to splenic flexure, thence down descending colon to sigmoid flexure. Repeat this process the same way several times, not tapping heavily, and your efforts will be crowned with satisfactory success for constipation; but the other methods used for constipation should not be neglected, remembering all the

time that the hepatic secretion, called bile, is an irritant ~~the~~ stimulates the mucous membrane of the intestinal tract, and is set in motion and action through the splanchnic nervous system. The next number of our plates represent another step in the manipulation of the abdomen that is very efficacious in relieving constipation, peristalsis, etc.

PLATE XXXVI.

The patient lying on the back, the operator places one hand, spread out and covering as much of the abdomen as one hand will, placing the other hand on his own, over abdomen of patient, using gentle pressure rotates from left to right slowly and firmly for several moments, then disengages his hands and goes through a process of kneading for a little time; then repeat the rotary process and the percussing (tapping) process. These measures should be applied at least every other day to insure satisfactory results in cases of chronic constipation. There are other manipulations sometimes necessary in the cure of constipation that will receive attention at the proper place in this book.

PLATE XXXVII.

THROAT TREATMENT FOR CATARRH.

The patient, either lying on the back or sitting up on a chair or stool, head inclined backward, mouth wide open, the finger of the operator is put into the mouth just behind the last upper molar tooth, palm of finger looking forward; begins by gentle pressure at that place, and follows posterior border of soft palate across to opposite side, and back to place of beginning, not pressing too hard, only moderately. This stimulates the palatine nerve filaments and aids in removing venous stasis, the direct cause of the condition resulting therefrom, called catarrh. This should be done three times a week, and should be the finishing-up treatment each time the general treatment is given for catarrh. Care should be exercised that bruising be avoided, as the palate is fragile. The

finger should be thoroughly cleansed, with due regard to hygienic results, and in fastidious patients the cleansing will be a matter of intense consideration.

PLATE XXXVIII.

DORSUM TREATMENT.

The patient lying on the table or mattress, face down, the operator takes hold of the patient's foot, opposite the side he is on, places the heel of one hand about the middle of the back, on opposite side of spinous process, pressing firmly downward and outward, raising the foot, drawing the whole limb upwards and in a gentle curve, springing the back a little beyond the comfort of the patient. The patient should be inert, all of the muscles relaxed as regards his holding is concerned, or stiffening himself. Each time the leg is thus raised and sprung against the hand as the fulcrum, it should be lowered to the table, the hand moved the width of it down the spine, and this may be repeated several times at one sitting, the patient's head resting on side of face turned toward operator. This tends to relax the muscles on opposite side of body. The other side of back should be treated the same way at the same sitting. The ease with which this treatment is given is greatly increased by the operator getting up on the table at the side of the patient, his foot—one of them—placed on the mattress beside the leg of patient, the body resting on the other knee, up near the arm of patient, same side. The results of this treatment are apparent in many pathological conditions, as will be adverted to elsewhere at various times, as occasion requires, in this work.

PLATE XXXIX.

BACK MOVEMENT.

Operator on the side of table, standing. The patient reclining on the couch or table, on the stomach, face downward, all of the muscular system as nearly relaxed as may be, lying near the edge of the table, next to operator. The manipulator, using whichever arm most convenient, places arm,

OSTEOPATHY ILLUSTRATED.

underneath the limbs of patient, just above the knees, place the other hand about the middle of the back, finger knuckles placed on one side of spinous processes and thumb on the other; he presses firmly, inclining to push upwards, and at the same time raises the limbs upward, making the back form a gentle curve, holding it there and swinging it from side to side a time or two, then halting on a line with the body, increasing the pressure on the back by gently raising the limbs a little higher, then lowering the limbs to the table. This should be repeated several times, moving the pressure down the back, covering the whole of the lumbar region at one sitting. One operator may do this on reasonably light persons without straining himself, and to great advantage of the patient, which will be further explained elsewhere.

PLATE XL.

A CHEST AND BACK MOVEMENT.

The patient lying on the couch, face down, and face turned from operator, the operator places the one hand on the back of subject about the middle of dorsal region, on the opposite side of spinous processes, heel of hand pressing on the body close to the spines of dorsal vertebrae, in such a position as to press muscular tissue away from their moorings, then place the other hand under the axilla of opposite arm of patient, pulling shoulder toward, and pushing with hand on back from the line of axis of the body. This should be done on both sides, moving hand down the back a little each move.

PLATE XLI.

The patient lying on the stomach, perfectly relaxing the whole system as nearly as possible, arms lying loosely to the side or hanging off the side of table, face looking away from operator, the thumbs and fingers are placed on either side of the spinous processes, near them; the operator makes a sudden, springing push downward with both hands, beginning at upper edge of scapulae, and at each such sudden pressure

moves down the back, stopping at the last lumbar vertebra. If the operator is strong, the table not too high, this treatment may be properly done while standing on the feet, but where the operator is small, the patient large, it is better done, easier and more effectually, when the operator places himself on the table beside the patient, on his knees. This gives more ease in producing the necessary sudden pressure; but the hardness of these shocks must be governed by the case treated, susceptibility of force, and effect desired.

PLATE XLII.

A LIVER AND SIDE TREATMENT.

Place the patient on a chair or stool, the operator, standing at one side, places one arm around the shoulders and neck of patient, placing hand in front of upper chest region and holding shoulder so as to control it, places the other arm across front of chest, with hand to opposite side, finger ends placed at the sides of the spines, beginning about the sixth dorsal, and then pull the side forward (toward operator), using the arm around neck and shoulder as an antagonizer, pushing shoulder backward, while the other hand is pulling forward, the fingers endeavoring to draw the muscles from the vertebrae, as shown in the plate. This is one of the manipulations used in treating the liver, colic, pleuritic and lung affections that may be frequently utilized.

PLATE XLIII.

THE "PULL-BACK" TREATMENT.

Place the patient on a table, lying on the side; the arm uppermost should curve under the neck and reach back to and catch hold of the edge of the table he is lying on, so as to keep from being turned off of the table during the treatment. Let operator take hold of patient's ankle with one hand (the one above), place the thumb and fingers of the other hand on either side of the spinous processes about midway of the back, pressing firmly, inclining to push upwards, pull the foot and

leg gently backward, giving to the motion a sort of a spring, then let it go to its normal position. Repeat this movement several times, moving the fingers down an inch or so at a time as the leg is drawn backward. This move not only stimulates the terminal filaments of the spinal and sympathetic nerves, but it stretches the abdominal muscles and the anterior muscles of the thigh, and can be extended on down the thigh over the course of the great sciatic nerve, as in the treatment for sciatica and uterine affections mentioned elsewhere, more particularly that of amenorrhea and affections due to abnormal functions of these organs caused by capillary congestion.

PLATE XLIV.

The patient seated on a chair or stool, the operator standing in front, knees between operator's knees, so as to steady the body on stool, the operator takes hold of the wrist of patient with one hand, places the other hand and arm on same side of patient in such a manner as to let the fingers press on the sides of spinous processes on the side next to operator, and up between scapulae, about the fourth or fifth dorsal vertebra, fingers gently curved, so as to apparently grasp the muscular tissue under skin, and now, with the arm extended, carrying arm of patient upward, places same to the side of the neck (of operator), straightens himself upward and backward, stretching all of the muscles of the side of the patient, then holding them in that position, pushes the arm backward gently, firmly, steadily, cautiously, as far backward as a line of the back of the head of patient; then, having a firm hold of the wrist of patient, fingers of the other hand still in position on the sides of spines, bends the elbow of patient at right angles and pushes it down over arm to the side of patient, firmly, suddenly. Repeat this move several times, lowering the hand on the back each time the width of the fingers, covering locality on the back as low down as the lower edge of ribs. The other side should usually be treated the

same way. A moment's reflection shows the importance of these moves in raising all of the chest, side and intercostal muscles.

PLATE XLV.

The patient sitting on a stool, chair, bed or bench, the operator, standing in front, places both hands around neck, letting fingers meet posteriorly, with ends of same somewhat curved, pulps of ends of fingers pressing against back of neck on either side of cervical spinous processes, with the thumbs looking upward at the sides of the head, steadies the head of patient, pulls gently, yet firmly with fingers, and steadying head with hands, inclines to bend neck forward and head backward at the same time, making gentle pressure on back of neck, embracing vasomotor region, holding the fingers in position for a moment, then changing fingers to other points on neck and giving springing motions of neck. This is one of the moves for headache, and comes in the general treatment, and utilized in the treatment of many diseases, stiffness of the muscles of the neck, neuralgia, rheumatism, spinal affections, etc.

PLATE XLVI.

This plate is designed to represent the continuation of Plate XLV. Whilst the hands are holding the neck, fingers nearly meeting at back of neck, close the hands somewhat, raising one elbow and lowering the other, rotate the head partially on its axis, going through that motion, raising first one elbow, then the other, inclining to press upward at the same time, so as to stretch the muscles on all sides of the neck while the movements are being executed; then finish the movement by closing the finger-ends against the sides of the spines of the cervix, pressing so on the fingers as to pull the muscles of the sides of the vertebrae forward, changing positions of fingers two or three times before letting the patient go. This movement should be done with caution, so as not

to dislocate the vertebrae. This treatment will relieve much contracture of the cervical muscles, and greatly aid in relieving congestion of the head.

PLATE XLVII.

TREATMENT OF THE MUSCLES OF BACK OF NECK.

The patient sitting up, the operator places one hand on the forehead, the other on the back of the neck, one or more fingers on one side of spinous processes, the thumb on the other side, and both close up to the atloid-occipital junction, where the finger and thumb are made to press gently—or even strongly, as the comfort of patient seems more or less susceptible to impression—then counterpress with other hand against the forehead, inclining to push upward with the thumb and fingers on neck. Lower the finger and thumb a little and repeat movements until all of the cervical region is gone over. This move not only stimulates the nerves in the vasomotor region, but stretches the muscles on front and back of the neck, aiding in removing much congestion of the venous blood and the lymphatics, emptying them into the large jugulars.

PLATE XLVIII.

This plate represents a neck treatment, and a method of stretching the muscles in many cases where movement is not so much needed as stretching the whole muscular system upward, and at the same time controlling nerve influence as well as arterial circulation, venous and lymphatic activity. It is curative for many severe headaches.

The arm of the operator should be placed under the chin, the bend of the elbow receiving the chin, and the arm so held as not to choke the patient, the fingers and thumb of other hand situated on either side (both sides) of the spinous processes of vertebrae, up close to the base of skull, rather firmly pressed; lift chin gently with the arm, pulling upwards, and at the same time pressing with finger and thumb against back of neck. The head should be tilted gently backward

and forward several times, using gentle upward tilt each time. This should be done easily, but firmly, changing the position of thumb and fingers so as to cover all of the cervical vertebrae at one sitting.

PLATE XLIX.

VIBRATORY MOVEMENTS.—CONTINUED DOWN BACK.

The patient being seated on a stool or chair, the operator bends head of patient forward against chest, places the ends of the fingers of both hands close up to the edge of occiput, just posterior to mastoid processes on either side of neck, and with quick successive movements, holding finger ends against the skin so as not to slip, but move the skin with the fingers; makes movements with ends of fingers, held steadily toward spinous processes and back towards ears of patient, several times rapidly; then moves ends of fingers downward, and goes through same sort of moves, continuing this until these moves include the muscles of back of neck down to top of shoulders. This is a thrilling, vigorous, exhilarating treatment, and aids in promoting circulation of the blood, regulating it, and stimulating recurrent nerves along side and back of neck in all of the cervical region, and embraces the spinal accessory as well, on either side of spine all the way— or anywhere over body.

THE VIBRATORY MOVE ON BACK MUSCLES.

The patient lying on the face, on table or mattress, the operator, standing at the head of patient, places the tips of fingers on either side of spinous processes, pressing on pulp-ends of fingers moderately firm, moves them up and down the sides of the spines, or in a vibratory manner, changing them to different localities at short intervals, so as to frictionize all of the muscles along the whole length of the back. This same sort of a vibratory move may be used in various places on the body, depending on what is indicated in the various pathological conditions. This is a most excellent and effect-

ual means of soothing the system, of increasing surface *capil-*
lary activity, and stimulating peripheral nerve action.

PLATE L.

This plate shows a special movement for sore throats, catarrh, enlarged tonsils, etc. The patient lying on the back on a bed or table, the operator, standing at the side, places one hand on the forehead, the other across the upper part of the chest, not letting either hand or arm rest on the patient, but places one or two of the fingers on the opposite side of the neck, pressing pulps of fingers against side of neck; push the head with a rolling move over toward opposite side, and at the same time holding the fingers steadily on the skin on the side of the neck so as to seemingly pull the deeper tissue toward him, then bring the head back to former position; repeat process a number of times, placing the fingers at different places on the side of neck at each and every turn of the head from you. Cover all that side of the neck thereby, then do the same on the other side of the neck. Continue moves for several minutes.

PLATE LI.

The patient seated on a stool, the operator takes hold of wrist with one hand, places the other forearm in axilla of patient, extending arm and pulling up in axilla hard enough to distinctly raise the shoulder of the patient, being careful not to use greater strength than simply to lift the shoulder joint slightly upward, the arm being drawn down to the side of the patient, with the hand of the operator, as seen in the plate. This is an excellent movement for lifting the whole shoulder joint, including the clavicle and scapula on either side, as well as both sides. It stretches the serrati muscles, and all of the muscles inserted or attached to the arm, and liberates much of the impeded circulation of venous blood in the whole arm, aiding in the cure of many diseased and semi-ankylosed shoulder joints. Much good may be accomplished by this movement, which should be done on both sides.

PLATE LII.

After raising the shoulder joint, as seen in Plate LI., the patient sitting on a chair or stool, the operator takes hold of the arm of patient at wrist with one hand, and with the other hand just above the elbow, thumb above, and all of the fingers encircling the arm, letting the finger ends rest above external condyle of humerus, in contact with ulnar nerve as nearly as may be where it passes around the condyle of humerus, holding arm of patient against the body in such a manner as that the back of arm shall rest against the body of the operator; and now bend the arm gently backward, springing it a little, then, letting up with the springing backward pressure, holding the arm in position against the body, with the hand holding the wrist, roll the forearm toward the body of the patient, describing as nearly as may be a half circle, squeezing the fingers of the hand holding the arm above the elbow, so as to pull all the muscles forward, and articulate the elbow joint briskly for several successive moves at one sitting. Then treat the other likewise. Do not fail to recognize the fact that this move assists in freeing the muscles, the *nerves*, blood vessels, etc., in that quarter of the body.

PLATE LIII.

TO RAISE CLAVICLE.

The patient sitting up, the operator, standing at the side, takes hold of wrist of patient and places the other hand at the side of the neck, with the second finger on upper margin of the clavicle, about half way between the two ends, the third and fourth fingers resting on the side of the neck, and the forefinger placed above or at the inside of clavicle, in as easy a position as may be; now raise the arm gently, and at the same time push the finger down between the neck and clavicle, then carry the arm to the other side of neck of patient as if to place hand on opposite shoulder, extending it somewhat, which causes the clavicle to be moved outward. This should be repeated, and the other clavicle served in the same

way. This is one way to raise the clavicle, and not the **least** important, either; and, being used in almost every **general** treatment, should be done with perfect ease, and **dexterously**, and need not be painfully done to the patient.

PLATE LIV.

TO RAISE CHEST MUSCLES, AND TREAT SPINE.

The patient sitting on a stool, body as near erect as may be, the operator, standing directly behind, takes hold of the patient at the wrist, letting thumb rest on the palm of patient's hand, with fingers encircling patient's wrist, one foot placed at the side of the patient (at the side the arm is to be manipulated), the other foot placed farther to the rear, the thumb of the other hand placed on the side of spinous process about the upper dorsal vertebra, on the side of processes next to arm to be manipulated; then, being in such a position as to be able to follow the arm to the side of patient, cause the arm to rotate inwards, upwards and backwards, and just as the arm is being brought over the shoulder axis, wrist about even with top of head, the thumb, used as a fulcrum, is suddenly pressed against the back at the side of the spine, and the arm drawn suddenly toward the line of axis of thumb, and as suddenly the thumb pressure is made, so that a sudden stop is now made as the wrist is drawn a little beyond the posterior border of the shoulder, and then the arm is allowed to resume its position at the side of patient. The same move is repeated, the operator bringing the thumb down an inch or so at each manipulation, as aforementioned and described. Care should be taken in this move that the circular move is adhered to, for if the arm is drawn up to the side of patient, pain is experienced in the shoulder joint, and care should be had not to wrench the shoulder out of joint. This is one of the most difficult movements to properly execute, without personal showing—similar to the one made on the table, with arms extended. It is an important move, for all of the intercostals and chest muscles are involved in it, and as the arm is such an

important lever, this move becomes the more important. This move will be very frequently referred to in the treatment of disease.

PLATE LV.

THE KNEE CHEST EXPANSION.

The patient being seated on the stool or chair, the operator takes hold of patient by the arms (above the elbows—hands outside of), holding arms steadily, places the knee on the back between the scapulae, foot turned to one side so that the side of the knee will be against the back, and not the end of the knee, so as to produce pain; now gently pull upon the arms, pushing with the knee as a fulcrum, having patient at the time inhale deep inspiration, the arms being pulled upward and backward at the time. This should be repeated three or four times, letting the knee be moved down each time two or more spaces of vertebrae. When it is known that this move takes off the pressure from nearly all of the chest muscles, the thoracic viscera, relieving many supposed incurable pathological conditions, its importance will be recognized. Asthma is usually relieved at once by this move; painful inspiration, pleurisy, heart troubles and many other conditions are treated in this way. There will be frequent references to this move in the body of this book, and its importance will not be overlooked when tried by the operator.

PLATE LVI.

SHOULDER AND NECK TREATMENT.

The patient seated on a stool or chair, the operator, standing in front, takes hold of the wrist of the patient with one hand, places the other hand on the shoulder of patient, raises the arm with one hand, and with the fingers of other hand extended, grasps the supra- and infra-scapular region, pushes arm upward and backward, pulling and grasping the side, top and back of shoulder region with a gently gripping motion, as the arm is pushed upward and backward, so as to

in several such moves embrace all that side of the neck and shoulder; then treat the other side in the same manner, at the same sitting. Care in making these moves stimulates the health region of the body in such a way as that much relief is experienced at once by the patient.

PLATE LVII.

RAISING CLAVICLE.—HEART TREATMENT AND GOITER.

The patient sitting up, the operator places himself as follows: Standing beside the patient, and taking hold of the arm at the elbow, the elbow bent, forearm flexed, and with the other arm holding the other shoulder, and letting the forearm cross the side and front of the chest to the opposite side, he places the thumb above the clavicle, and as the arm of the patient is drawn up by the operator, the thumb is gently pressed behind the clavicle so as to push it outward as the arm on that side of the body on which the clavicle is to be raised; he now pulls the arm steadily and firmly backward and upward, pressing against the clavicle at the same time, then lets go arm at once. This is one of the methods of raising the clavicle, and should be used for goiter as a first move, as it presses the clavicle away from the large veins which carry the blood from the head to the heart, thus aiding in relieving the pent-up blood in the *thyroid gland*, that produces enlargement of that gland. This, and "a particular altitude on the mountains of Switzerland," produce goiter; and the Osteopath cures them. It requires a treatment two or three times each week for months in some cases, but there are some cases cured in a few treatments. The soft variety yields more readily.

PLATE LVIII.

GOITER MANIPULATION.

Seat the patient on a stool or chair, the operator standing behind patient, both hands are placed around the neck, letting the finger of each hand touch and be placed on the

sides and posterior borders of the tumor, thumbs on or near the temples; begin a sort of rotary motion of the head, pressing with the fingers on the tumor, gradually encroaching on the tumor from behind forward, as each rotary move is made, as shown in the plate. The clavicle should be raised previous to beginning the pressure on tumor. Several moments should be used in this treatment at each sitting, and treatment should be made three times a week. While some cases are easily reduced to normal size, there are others which require months of steady treatment to effect. The soft goiter readily yields to this sort of treatment. This movement greatly aids in freeing stiffness of the neck muscles, freeing the pent-up venous blood, the lymph as well, so that it cures many troubles of the neck and throat. It is a good movement indeed.

PLATE LIX.

DIPHTHERIA AND SORE THROAT.

The patient being seated on a stool, the operator, standing at the back, places one hand on the forehead, the other on the side of the neck, fingers gently curved so as to grasp the skin, and as the head is rolled toward opposite side of neck, the hand on neck on opposite side grasps the skin up close to the posterior angle of lower jaw, or anywhere at the side of the neck, pulling the hand gently as the head is pushed or turned in that direction, and then head returned to its normal condition, face looking straight in front of body; then same move is repeated a number of times, the fingers being placed in different places on the neck, and so on until all of the muscles of that side of the neck are thoroughly manipulated. This sort of treatment is requisite in many diseased or congested conditions of the neck, and is one of the treatments for goiter, diphtheria, tonsillitis, croup, wry neck, headache, etc.

PLATE LX.

UPPER CHEST EXPANDER.

The patient sitting on a chair or stool, the operator,

standing in front, holding patient's knees between his, place hands on either side of the neck of invalid, so as that his fingers press on either side of dorsal vertebrae in the scapular region, well up to the top, the patient locking hands back of his neck, holding tightly, but not holding elbows stiff; the operator, pressing fingers against sides of spinous processes, at the same time pressing the arms of patient outward, using his own fingers as the fulcrum, and the arms of the patient as levers, spreading his own arms so as to push the patient's arms backward and outward at the same time, thus causing expansion of the chest of patient. The fingers should be placed lower as each move is made, so as to cover several successive localities down the dorsal region, and at the same time pulling the hands upward and outward each move, stretching the chest muscles thereby. The importance of this move may be readily appreciated in all diseases of the chest.

PLATE LXI.

A CHEST EXPANDER AND SPINAL STIMULI.

The patient seated on a stool, the operator standing before him, the hands locked back of the neck; the operator places the arm on one side of the neck, hand extending backward, he places fingers on opposite side of spinous processes; taking hold of the elbow of patient, pushes arm backward, and at the same time presses against the back, so as to press the muscles away from the spines, using considerable force, and at the same time letting the other arm be held so as not to displace the (his) fingers on the back—that is, manages to steady the shoulders during these moves. The hand of the operator is lowered a little each move that is made, to press the muscles from spines. The importance of this move may be readily understood in the treatment of diseases of the chest, shoulder joint, and in asthmatic and heart affections, as well as of the lungs.

PLATE LXII.

SPINAL CORD STRETCHER AND STIMULANT.

The patient being seated on a stool, the hands locked and raised perpendicularly over the head, the operator, standing at the side or nearly so of patient, places his elbow through the loop thus formed, with elbow pointing forward of patient, puts his own hand in the locked hands of the patient, and if the patient is heavy, brings hands up to the side of his own neck, then steadies it there, pressing thumb and fingers on either side of the spines on dorsum, beginning as high up as the middle of scapulae; he now raises the arms and patient upward, rather inclining the body backward against his fingers, which are against the back. In the succession of these moves, the fingers are to be gradually lowered each move until the whole dorsal vertebrae are covered by the fingers, stretching the body of the patient upward as much as may be, regarding comfort. This movement enters into a series of manipulations that serve to move all of the muscles of the body and chest, both in front and rear, as well as on both sides. It should be done carefully and dextrously, and will be of great benefit many times. Consumptives derive great benefit from this manipulation, as it stretches the pectoral muscles, serratus muscles, raises the clavicles, the intercostal spaces, and at the same time stretches the abdominal muscles, removing congestion of venous blood, and has a wonderfully exhilarating effect on the whole person.

PLATE LXIII.*a*

CHEST, ARM AND BACK MOVEMENT.

Place patient on a chair or stool, the operator standing in front, takes hold of both hands around wrists, and assistant standing behind patient, places thumbs or fingers on either side of spinous processes, well up between scapulae, holds them at this point as the operator raises the arms of the patient, upwards, pressing them backward by side of head, so as to stretch the pectoral, intercostal and all of the chest mus-

cles upward, and now, with a quick drawing forward of the arms, brings both hands down in front of patient, when the operation is repeated, the assistant moving thumbs down spine one or two inches each time until the back is treated as far as the tenth or twelfth vertebrae, using pressure as if directing thumbs upward each time, raising muscles from the spinous processes, outward as well as upward. These movements relieve many chest difficulties that other means fail to reach. Patient should take deep inspirations each movement.

PLATE LXIII.*b*

This plate represents the position of patient and operators of preceding plate, in the position when manipulation begins, and when arms of patient are brought forward after each move of raising arms above head and backward toward assistant.

PLATE LXIV.

ONE TREATMENT FOR PAINS IN BACK.

The patient seated on the table, couch or chair, the operator, at the side, places one arm in front of the body so as to embrace the shoulder of the patient between his own arm and shoulder, taking hold of the arm—it flexed at the elbow, so that it may be used to draw the patient upward as patient is inclined backward. The operator now places thumb and fingers of other hand on either side of the dorsal spines about the fourth dorsal vertebra, placing his neck behind the neck of patient, patient resting neck on neck of operator, and fingers in place on the back, pulls patient backward and upward, and inclining backward until the elbow of operator rests on the table directly back of patient; then raises patient in sitting posture, relaxing all holds, placing fingers on the back a little lower, presses fingers on the back; repeats these moves until the whole spine is thus treated, observing to draw his own elbow toward his own side of the table, so as to give room for the body of patient to come as low as may be to

receive due pressure upward each move, as the body of patient inclines backward. This treatment should include all of the dorsal from the fourth clear down to the last lumbar, being particular to control the amount of pressure on the sides of the spinous processes according to the susceptibility of the patient, and as the necessity demands. This treatment is essential in many pathological conditions, and should be utilized when needed.

PLATE LXV.

Same as LXIV., only the inclined position, with neck of patient on neck of operator, showing how movement is made, and elbow on the table.

PLATE LXVI.

This move is for stretching the pectoralis, major and minor, coraco-brachialis, and supra-scapular muscles. Useful in many shoulder troubles; rheumatism, paralysis, etc. The operator, standing behind patient, places his arm directly across the upper and front of chest, embracing the shoulder on the side opposite the arm to be treated, so as to steady the chest, letting the point of shoulder be fixed; extends arm to the opposite shoulder (the one to be treated), gathering the muscles under the patient's arm with his own fingers, and with his other hand holding the elbow of the patient, pulls arm backward and upward, and at the same time counter-pulling with the fingers under the arm with the hand placed there, holding the muscles, stretching them with caution, gradually increasing the stretching as the arm and muscles become more pliable. This manipulation and the one succeeding (No. LXVII.), may be used quite frequently for many seemingly stiff and immobile shoulder joints, to great advantage, as well as for rheumatism, neuralgia, and to reinstate normal circulation in muscles of the arm.

PLATE LXVII.

The operator, standing behind the patient, takes hold of wrist of patient with one hand, standing against the side and back of, so as to steady the body, places other hand under lower, outer aspect of shoulder joint, embracing with his fingers the several muscles under the arm in his own grasp, pulling the arm of patient directly forward and across the front of the chest, antagonizing the hold of muscles under arm with the hand holding the wrist. This stretches various muscles at the side, back and under arm—serratus, teres, latissimus dorsi, biceps, etc., and takes off the pressure, increases capillary circulation and relieves pain in shoulder very often like magic.

PLATE LXVIII.

SPINAL AFFECTIONS.

The patient seated on a moderately low stool, the operator standing in front, patient having hands locked and placed at back of neck, the operator extends arms under those of the patient, back, so as to let ends of fingers be placed on either side of the dorsal vertebrae, beginning with fingers anywhere, according to object intended in the treatment, using such pressure as desirable, or needed to raise, and at the same time tilt the body of the patient from side to side as the pressure is being made on the sides of the spinous processes by the fingers, letting the whole body be suspended as nearly as may be, while these moves are being made. The operator may begin with hand down as low as the sacro-lumbar vertebrae, or anywhere between the scapulae. This treatment is essential in many spinal affections, constipation, lung and liver torpor, spinal irritation, backache, lumbago, amenorrhea. The arms rest on arms of operator as these movements are being made, and if the knees of patient are embraced between the knees of operator, steadiness is the better maintained, and a more complete control of patient secured. These moves

may embrace any part or all of the lower dorsal or lumbar regions of the back.

PLATE LXIX.

SCIATICA AND LOCOMOTOR ATAXIA.

The patient being seated on a stool or chair, the operator places himself behind the patient, takes hold of the knee on the one side, places other hand, with thumb and fingers—or simply the thumb—against the side of sacrum, over sciatic nerve, raises knee by gentle pulling of hand, while pressure is made with thumb over sciatic nerve, in a somewhat rotary, springing motion, aiming to use considerable pressure on sciatic. This move may extend the whole length of sacrum or lumbar region, or both.

PLATE LXX.

TREATMENT FOR EYE TROUBLES.

The patient seated on a chair or lying on a couch, or in any position the operator may elect for convenience, the edge of upper lid is raised at the outer canthus with thumb and finger of one hand, and the index finger of the other is introduced into the eye at the outer canthus, and carried as far back as the retrotarsal fold—the posterior border of upper eyelid; the thumb placed on outside of eyelid in juxtaposition to the finger, and compression is made of thumb and finger together, and a gradual stretching of the lid, pulling it from the eyeball, and at the same time compressing *granules* on inside of lid, moving finger in the eye to inner canthus—that is, the inner edge of the eye—clear up to the side of the nose; then, with a sudden move, take the finger out of the eye. This is the upper eyelid treatment for *granulated eyelids*, and should be done every three to five days. *No lubricant* should be *used* on the finger, but the fingers used in and about the eyes should be well cleansed with good soap and water, nails made smooth and clean, and after the above treatment patient should bathe eyes in water, with a teaspoonful of salt to each

pint of water used. If there are *granules* or enlarged *follicles* on inside of lower lid, introduce end of forefinger into outer canthus so as to let palm of finger be down toward inferior border of eye, facing the orbital plate of superior maxillary bone, pressing finger on upper edge of that bone, carrying all of the tissue against the curved portion of it, and pressing somewhat firmly the tissue before the finger down on that plate, carrying the finger to the inner canthus of the eye, and turn palmer surface upward as it is removed to the side of the nose, pressing the whole surface of the inner canthus, and on that portion called the lacus lachrymalis, coming out of the eye quickly—not with any delay or rubbing motion. Get away from the eye when done treating it, at once. Patient will then bathe eyes with the salt and water solution above named, either warm or cold, as seems most pleasant. This treatment should be repeated as often as once in five or eight days. There is great benefit to be derived from this treatment. It takes off the pressure of contracted lids, which causes ulcers of the *cornea*, and perpetuates them, and cures ectropium, entropium, as well as almost all other inflammations of the lids and *eyeball*, blepharitis-marginalis, etc. Reference will be had to this plate frequently. The two plates represent the treatment of both eyelids, for all sorts of eye troubles—chronic especially.

PLATE LXXI.

FLEXING KNEE ON THIGH AND THIGH ON ABDOMEN.

Patient lying on back on couch or table, operator seizes leg just below knee and proceeds to bend limb at the knee and thigh, doing so strongly, stretching muscles of the whole limb, and while in that position the hip joint may be manipulated with other hand and fingers, beginning on sides of lumbar vertebrae, as high up as desirable to liberate muscles of that area, and proceed to treat along down the course of the sciatic nerve, bringing the limb outward and downward each time the fingers are pressed upon area covered by them.

This is the method of moving hip joint in nearly all of the ailments of the hip joint, and in confinement to fest the loins and hips after parturition. It soothes, rests, stimulates, promotes free circulation of the blood, and very often relieves all or any of the muscles of the hip joint of pain, or the limb from soreness.

PLATE LXXII.

VARIOUS DORSAL TREATMENTS.

The patient seated on a stool or chair, the operator places hands under patient's arms, placing his finger-tips against the sides of the spinous processes, gently lifting the body of patient and swaying him from side to side, using alternate pressure each move, changing position of hands each sway, beginning either at sacro-lumbar junction, or anywhere along the spine, according to effect desired. This movement is used for many conditions of the spine and abdominal viscera.

A WORD ABOUT OSTEOPATHIC MANIPULATIONS.

The seventy-two illustrations given in the Osteopathic Department of this book will be found to be the best in the ranks of osteopathic treatment; but when the Neuropathic Department is thoroughly comprehended it will be found that the manipulations will be much better adapted to the accomplishment of the purpose than any others known, and yet we would not underrate the efficacy of these in this department. They are really for the same purpose—freeing the nervous system—and they being of my own improvising, may as well be classed under the name neuropathy as not. (Every osteopathic treatment should be accompanied with a *neuropathic treatment*.) I make this statement that there be no confusion as regards treatment. In many cases the two may be combined, but too much treatment at one sitting is not to be considered, for overdoing is apt to be done than just what suffices. Too long treatments—osteopathically—are exhausting rather than beneficial. The freeing of the nerves involved and uniting the forces will be enough, usually. As all the manipulations are for that purpose they should be classed

under neuropathy. There is no such a thing as bone pain, therefore no such a thing as osteopathy, in fact. We believe that what is contained in this book will be amply sufficient to meet all of the conditions called disease, if rightly applied, and conscientiously submit the same to the afflicted everywhere.

THE WAY TO GET SATISFACTORY RESULTS FROM OSTEOPATHY.

If the several plates are studied and their several instructions carefully mastered as shown in the part which describes them, any treatment can be selected which will meet the indications for any condition which may be found to exist anywhere in the body.

It will be understood that osteopathy is more especially applied to restore the circulation of the fluids of the body than for any other purpose, and that neuropathy has for its sphere the removal of nerve pressure and irritation of nerve filaments; therefore, when either condition is to be considered and treated, the part which is applicable is to be utilized—used.

The Ophthalmological Department has for its object the arrest of the nerve-waste through the effort to see—to shut out oblique rays of light—and to make all rays as nearly parallel as may be to see clearly; hence the use of glasses needed, in all such conditions.

If the several indications found in the multitude of conditions, known as disease, receive special consideration, as shown in this book, there need be no mistake in selecting what sort of treatment to apply.

Whether one is suffering from fever, colic, or spinal curvature or from nerve waste, the indications are easily found, and treatment should be instituted accordingly.

The suggestions given herein may be the means of doing a vast amount of good in the way of suggesting new means of applying treatment which the author has not shown. The important things to be done are to meet the demand in any given case, and afford relief from suffering, and we know that what is shown herein will be amply sufficient in the larger majority of human ailments.

Study the conditions found or existing, and then study what is indicated, then apply the remedy faithfully and the results will be as stated, most generally.

Do not expect any benefit from the science—any part of it—without it is used—applied—and that, too, according to directions and for the purposes intended. It is not a guess-work system, but scientific and effectual, and will not fail in any case which has not exceeded the limit of possibility to cure.

We make these bold assertions for we know whereof we affirm, having proven everything shown in this book, and know that the applications for the several conditions are just what they are recommended for, and will not disappoint, when properly applied—used.

If the reader will fix in the mind the fact that disease is a product, and that it has a cause for its existence, and that when the cause is removed the disease cannot exist, and know that the causes are as stated in the very beginning of the book—nerve-pressure, nerve-waste, impeded circulation of the fluids of the body, irritation, poisons and accidents—there need be no lack of confidence in applying the instructions for their removal.

We, therefore, urge the reader to go at the study and the application of the several departments of this book, implicitly relying upon the whole as a reasonable proposition, and that can be verified to the letter when directions are strictly carried out.



The following information is provided for your reference:

1. The first section of the document discusses the importance of maintaining accurate records.

2. The second section outlines the procedures for handling confidential information.

3. The third section details the requirements for data security and access control.

4. The fourth section describes the process for reporting and resolving issues.

5. The fifth section provides information on the roles and responsibilities of the staff.

6. The sixth section discusses the importance of regular communication and reporting.

7. The seventh section outlines the procedures for handling complaints and grievances.

8. The eighth section details the requirements for maintaining a safe and healthy work environment.

9. The ninth section describes the process for evaluating and improving organizational performance.

10. The tenth section provides information on the organization's commitment to diversity and inclusion.

The Science of Neuro-Ophthalmology.

INTRODUCTORY

What is embraced in this book?

Starting out with an explanation of the philosophy of the science of Osteopathy and its application, the reasons for its necessity, and its wonderful effects when rightly applied, and showing concisely the principles, the uses of the tissue elements in the body, and how mind permeates every tissue and superintends the arrangement and provides for every change necessary to carry on the affairs of every department of the human body, we elaborate the nervous system, and show the necessity of the two forces which have, for the most part, the functions of controlling the elements in every part of the body. We take up a method of application called Chiropractic, really what we call Neuropathy, and show how to unite these two forces and harmonize the elements, increase or decrease or neutralize the excesses, which cause harmony to be disturbed, and how to regulate these that healthy action may be restored and pains relieved instantaneously, and some of the most wonderful results produced which it is possible to conceive of, closing the volume with some practical remarks on Ophthalmology. This work, though not large, contains the kernel of the sciences which have to do in the treatment of diseases without the use of drugs or medicines.

After a steady and ardent course of investigation, and practical survey of all the pathies, and a zeal undaunted by any and all opposition and seeming obstacles, it has been our lot to have mastered opposing forces and overcome all obstacles, and we believe we have presented to the world the most useful volume on the subjects mentioned that the world has ever had, and we

submit it to the scrutiny and trial of the ordeal its contents will suggest, and know that, when honestly tested, it will be found fully up to its marvelous pretensions.

We have purposely left out nomenclature, for the reason that disease is a misnomer, and only means "want of ease," and that when the nervous system is harmonized, and freedom of the whole body from nervous strain and pressure prevails, and the blood has free circulation, possessing all of its normal elements, we have health. The contents of the book will fully explain all.

It is the system which deserves the praise, not the one who applies it.

Man cures nothing. Nature is her own restorer, and when all things are compatible she does restore the harmony. The province of man is to direct his intelligence to the removal of the obstacles in the way of natural law, and when these obstacles are out of the way, there is harmony, health; no friction, no pain nor disease.

Foreign substances, in the way of medicines, are not needed, for the normal elements in the body are all that are necessary to be used to constitute a natural body, and as this body of ours is made from the food eaten, the air we breathe into it, and the water we drink, when statedly and regularly supplied, it pursues the even tenor of its way naturally, and we have neither pain, ache, nor inharmony. A deviation and an unnatural pressure, or the over-use of the nervous system, produces confusion, inharmony, disease, sickness; and if continued, death. To arrest this inharmony is our prerogative to explain, and this we do by showing how to remove the strain and pressure from the nervous system. This we absolutely do, after we measure the effects produced, and the waste which has been going on, and is going on, in the body from the strain upon the nervous system, and then Nature does the curing. She rights the wrongs in her own unerring way. Now this is so simple a philosophy that any one ought to understand it to be the only proper method of healing.

Neuropathy and Ophthalmology furnish all the means necessary to accomplish this object. The science of Neuropathy removes the pressure, and Ophthalmology stops the strain — the

leakage—and when the proper habits are adopted, Nature restores the individual to a normal state—to health; and this is not a deception—it is done in all cases of functional conditions called disease. This much can not be said of any other method of treatment known to humanity; and this being absolutely successful, we need no other.

We are amply able to demonstrate our philosophy to the satisfaction of all classes and to all sufferers with any sort of human ailment, and assure them of immunity from disease.

Nearly all of the chronic diseases seem to have been the outgrowth of uncured acute diseases. They have been named according to Nosology, and rank as incurables by the majority of medical practitioners.

They affect the sufferer with all kinds of symptoms, and are mild, severe or excruciating, according to circumstances and temperament of the one diseased. *If it could be understood* that all these conditions, called disease, were *caused by nerve-exhaustion*, the remedies would be directed to the arrest of the nerve trouble causing the difficulty.

The medical profession are almost a unit on the “Germ Theory of Disease,” and are always supposing that whatever will destroy the germs will cure the disease. It will be understood that, when this science is properly applied, diseases get well and there is not a single thing used which has *any effect on the germs*, so-called; for such conditions known as *typhoid get well* almost from the first spinal adjustment. This being absolutely true, we conclude that “Antitoxines” are not needed in any condition whatever.

The union of the two forces, and the proper spinal treatment, changes conditions at once, and convalescence starts right from the first, and the typhoid is cured within a very few days.

Nervous prostration, many cases of years standing, and where all hope had been abandoned, have been restored to health and usefulness through spinal and ophthalmic treatment. Deafness changed to hearing, pneumonia abolished and cough cured at once. Indigestion, constipation and spinal nerve troubles, spinal curvature, sciatica, lumbago, as well as acute affections

of every name and nature, yield to the application of this science. Headaches, female disorders and irregularities and tumors, pains and discharges—all relieved by the means recommended in this work.

We feel assured that the principles and philosophy herein delineated will prove eminently satisfactory to all who apply the means advised for any and all conditions called disease and under all circumstances and all times.

This is not a "medicine scheme"—"a try system"—but a veritable, proven system, that can be relied upon. It does all that is needed to meet the *demands of the most extravagant expectations*, in all cases where applicable. It embraces the entire nervous system—including the various parts of the body, and every complication thereof wherein the nervous system is involved.

The human body, consisting of all the elements in due proportion, and having within itself the moving forces to express every action and movement, the matter resolves itself into an absolute certainty—that if the nervous system is permitted to perform its functions uninterrupted, freely, the entire body must be in harmony with itself; therefore, the problem of health need no longer be considered as unsolved. The thing to be done, in all cases, is to *adjust the forces* and supply the deficit. Many conditions may be relieved by the use of either science named; and some may require the application of *both or all of them combined*. Neuropathy rights a large per cent. of affections which result from spinal irritation, and the remedy may be found in the spinal adjustment alone.

Other conditions result from some venous obstruction or dislocation, or strain, and then osteopathy will generally be sufficient to afford relief. Many conditions result from eye-strain-over-use of the eyes, and then ophthalmology is the proper thing to utilize. We have combined these various means together, knowing the efficacy of each, so that this book may fill a long felt want, in the healing art, that never has been filled until now.

These methods are all so simple that they may not be deemed sufficient; but experience has proven them to be all that is needed to ameliorate the sufferings of the human family in every known condition called disease—where any means known will cure. They absolutely meet the indications—hence all that are necessary to be used.

There is enough said on each subject to be fully understood, and those who apply the methods suggested, will bless the day they learned the truths this book contains. A careful perusal ought to convince any one that it embraces all that one needs to use to meet the demands under any and all circumstances for functional, human ills.

From a simple cold to pneumonia, and from a colic to typhoid fever; and in all the phases of human ailments, this science is applicable and absolutely all that is needed. The reader is admonished to feel assured of the certainty of its efficacy as stated, if rightly understood and properly applied. Thousands have been cured by each one separately; and neither embraced the entire nervous system—but all combined unquestionably do. Much more might have been said regarding each subject, but we opine that enough has been said to convince the reader of the certainty of the utility of the means described; and the utter uselessness of cumbering the mind with useless stuff simply to make believe. Use the means suggested—persistently, confidently relying on effects. Satisfaction will result.

This combined science will be adopted by the ages to come, for truth is mighty and will prevail. Study it, use it, recommend it to all who are afflicted everywhere.

MENTAL ABERRATIONS IN DISEASE.

Recognizing the fact that almost every individual (except ourselves) is a crank, even in what we consider a normal state, it becomes a matter of experience that invalids are conspicuously so. It seems to be a prominent characteristic in chronics to intensify and try to make believe that their case is the most peculiar one ever presented to their doctor, and almost always will ask, "Doctor, did you ever treat a case like mine? Did you

cure it?" And then they will endeavor to be more particular to re-emphasize some special features of their complaint, fearing lest the doctor does not absolutely understand their case. All such cases are to be found in every doctor's practice who treats chronic ailments. These same people will ask you to guarantee to cure them before they pay you for your professional services. With all such be particular to secure your charges beforehand. Never promise too much. Do not make too positive statements to such people, for they are sure to be dissatisfied if you do not do more for them than anybody ever did do for them.

THE POSSIBILITIES ARE ALWAYS LIMITED.

The effects of *the proper application* of this science are incalculable, but there comes a time when all human skill is inadequate to meet the demands. The limit has been passed, and the fate is sealed. Such cases should be kindly and seriously informed of their condition. Promise nothing you are not reasonably certain you can do for your patients.

They come to you for the benefit of your skill, and having been made to believe in the superiority of your system, and you should always be honest with them, both in charges and prognosis of the application of your science and skill, for your reputation depends upon what you promise, and what you do for your patients, whether you fully discharge your duty or deceive them.

If there is any doubt about your success in a given case, give the patient the benefit of it, and if another doctor can do more and better for your case than you, fail not to recommend that doctor, and urge your patient to seek his services. Deal honestly with all.

WHAT THIS BOOK WILL TEACH YOU.

The value of any book is dependent upon what the reader gets from reading and studying its contents. Its value will depend upon its contents, what it treats on, and whether the things said therein are reliable, and absolutely beneficial when applied.

WHAT THIS BOOK INCLUDES AND EMBRACES.

It includes the best of every scientific, rational, natural method of cure for human ills ever presented to the human family.

It embraces instruction which has been verified by practical application.

It embraces in its application the entire nervous system; suggests every known means to remove causes of conditions called disease; it teaches how to apply Neuropathy in all of its various manipulations, adjustments, etc., includes all there is in Osteopathy, from its incipency to the latest thought taught regarding that system of treatment; it gives the reader the pith and substance of Suggestive Therapeutics—how to apply it; gives minute instructions regarding the uses and application of Magnetism; tells you all you need to know about Bathing, Breathing, Dieting; and instructs Mothers how to care for the little ones, the child and the youth; has a chapter on Painless parturition, how it is effected; how to care for the baby when born, and many other things useful and helpful to every individual in the human family.

It tells how to care for your eyes, and how to save nerve power expended through them; how to fit the right sort of glasses on them; how to cure sore and inflamed eyes, and how to arrest nerve waste by the use of glasses, and how to prevent Nervous Prostration of school children; to save their eyes, their strength and manhood and womanhood while in school, so as to come through their studies without breaking down in health.

This book is a mine of knowledge that can not fail to interest the reader every way in the right direction to save life, health, money and disappointment in life.

It is worth everything to anyone to know what is in this book. It is the product of ripe experience by one whose life has been devoted to the study of the best means to alleviate human suffering, and we commend it to the afflicted as worthy of their profoundest consideration and deepest thoughts.

The entire book reads like a novel, and yet contains a philosophy found nowhere else in the annals of literature—in so concise

a form as is found herein. Study it, learn it, apply it, and you will be amply rewarded for the time and cost.

Besides the above, there will be found many valuable receipts and instructions in it which are invaluable, and come in the way when nothing else will suffice but them.

THE ONE GRAND RESULT TO BE OBTAINED.

In the use of either method of treatment mentioned in this book, the one object aimed at is that of Freeing the Nervous system.

The various methods blend together admirably, but neither one alone may be all that need be applied; for if, after seemingly all that can be accomplished by the application of either the end is not accomplished, something else should be done; then we have the other two to resort to.

Neuropathy is the name of the method used for all that is to be done to relieve conditions called disease, but the terms Osteopathy, Chiropractic, Ophthalmology, Suggestion or Magnetism, designate the how it is applied.

The whole man is involved in every condition known as Disease, and whatever method is used to Free the system from Causes, and harmonize the Forces by removing Nerve Pressure, Nerve Irritation, and Arrest the Nerve waste, accomplishes the purpose.

Whether, therefore, we use Osteopathy to free the Circulation of the blood, or Ophthalmology to arrest Nerve waste, or Chiropractic adjustments to remove nerve pressure, or Suggestion to stimulate mental energy, or magnetism to concentrate mentality and change molecular polarization, the object is accomplished through the one means—Neuropathy.

Whatever does the work of harmonizing Nerve action throughout the entire body, is the thing to use—and anything short of this is evidence of inefficiency. The entire Nervous system is involved in all conditions denominated Disease, and Sympathy embraces every tissue in the body through the Sympathetic Nervous system, and harmony can not exist when any part of it is disturbed; therefore the necessity to know a system

of treatment, which embraces every means necessary to accomplish the purpose, of removing the Cause producing it.

The student should study each part as a whole, and apply the means indicated in any given case, and results will be satisfactory.

SOME REFLECTIONS FOR THE READER.

In writing a book for the people, the writer feels the sense of inability to please. There are so many people who are not satisfied with a bare statement of facts, who desire to criticise every and all things not just to their liking, or as they would have it; and others who are ready to accept any and everything just as it is, whether right or wrong—they not feeling inclined to care, just so it is something different from what they have been accustomed to. Such people move along in their accustomed way, and both classes are to read this book. The only aim of the author is to present the facts as he understands them, and is assured that, after a careful perusal of the contents herein being thoroughly scanned and applied as stipulated, the results will be as expected—satisfactory.

To get a clear understanding of the philosophy of this science is essential to inspire confidence, and when that is once acquired, the application will be made intelligently.

The whole system is one of absolute simplicity, and consists in *Removing undue pressure, arresting nerve waste, and uniting the two forces* which control the manufacture of the acids and the alkaline elements, and removing the Friction, or Irritation, which causes muscular contraction; which interferes with, and, oftentimes, arrests the circulation of the fluids, and presses upon nerve trunks, or terminal nerve footlets, and thereby produces a *nidus*, or starting place for disease. All these conditions may be prevented, and save much suffering by timely treatment; and when existing may be easily arrested and intercept further progress and cure the patient at once, and save terminating into a diseased state.

CONDITION CORRECTED—CHANGED.

The conditions found to exist, which are generally denominated disease, are what we should concern ourselves about, and not the commonly denominated names of diseases.

Every known condition involves the Nervous system, and there will always be found—if the observer knows how to find the cause—some disturbance which, if removed, sets matters to rights—removes the whole difficulty.

If the reader could be persuaded that names are not what are to be treated, there would not be a desire, all the time, to ask "What shall I do for such and such a disease?" for disease is not a reality, but the *conditions are the realities*, and the pains are simply effects, which cease, when the causes are removed. That there is pain, redness, inflammation, swelling, destruction of tissue involved in many cases, is admitted; but it is because the causes which produced the effect continues, the results seen, continues.

If the reader will direct special attention to removing the causes which produce the conditions found, there will be no necessity of bothering about names, and assuming that this and that manipulation is good for such and such a disease. This is the thing we are trying to show the reader, so that the whole attention may be directed to removing causes that conditions may cease—then there will be no disease.

The people are very much concerned about being treated for certain "diseases," and the doctor is approached by invalids, saying, "Doctor, I have had thus and so for many years, and have come to you to be cured." In the majority of cases the doctor replies, "Yes; I have used a remedy for just such cases for years, and never knew it to fail." Thus catering to a deluded mentality which insures a fee for downright deception, a make-believe; and the poor, deluded victim yields to the oily-tongued physician, pays the fee, takes the medicine, gets no better, and when effects promised fail to materialize, has only abuse left to use in hard, ugly sayings to and about the doctor who deceived and robbed him of his finances, and sent him away with

a false impression about the certainty of the remedy he so highly and falsely extolled to get a fee from his deluded victims.

No wonder the world is "tired of medicine." No wonder the cry is for something more tangible, more certain of favorable results, less harmful and more rational.

If all men who practice the healing art were honest, and would study causes and do for their patients what is indicated, the world would be better than it is now, that way. The world will never reform itself, and advancement is made only by honest endeavor. Rascality, dishonesty and deception are poor commodities for the betterment of the world. "Deal justly, love mercy, and walk humbly before God" in all things, is the best maxim.

INTRODUCTORY EXPLANATION IN NEUROPATHY

The conflicting theories and prejudicial vagaries of the masses of humanity militate against investigating any new thing which claims superiority over the long-tried habits and ways of thinking. Suspicion of the new rankles in every human breast and will not down fully until indubitable proof demonstrates, to the thinking individual, its absolute merit.

Until all men and women are taught alike and their faculties are equally developed, and craniums rounded out so as to fully expand, all of them in the same proportion, we shall be confronted with expressions of opinions diametrically opposed to one another, and what will satisfy one will not satisfy the other. But there are some things all agree in, from the common stand point of necessity. All believe that eating is a necessity; all believe that breathing is a necessity; but all are not agreed as to what they ought to eat, nor how they should breathe. Education molds the mind in certain channels of thought; fixes the ideas; and all go and think in the direction of the least resistance, and are influenced by the strongest incentives—personally, acquisitively, selfishly and intuitively.

Investigation changes our thoughts, provided the thing investigated interests us. There are such diversities of teaching, from such a motley group of mentalities, that one must be an Iconoclast to make inroads upon the kaleidoscopic mental status of those whom he desires to interest.

Those whose mental calibers have not been stereotyped by transfixation, smoothed and polished in some stereotyped mold, can occasionally be induced to break away from old ways of doing things, and listen to the reasonings about other things—thoughts.

The question should always be, is the new idea better than the old one? Investigation and comparison, and sometimes a trial of the new, can only induce adoption when the new proves itself superior to the old. All the new ideas are stultified for a time, hindered, relegated to the unknowable or unbelief, until circumstances force recognition and adoption.

Ideas coming from a mentality on a level with the masses are generally accepted and popularized easier and faster than those originating in minds the most trained along the lines attempted to be the most beneficial. The common people want something simple, and the writer who can fully enter into the character of the mentality of his intended auditors is the one whose popularity may be assured; and whatever he has for them, dealt out to them as they like it, is sure to have a large following. Science is almost like a mystery to them, and they do not take much time nor pains to solve it, nor seek a meaning for it.

Inasmuch as a necessity exists for a book that will contain a simple and easy way to explain to the reader how to relieve pain, cure disease, live right and be healthy, we decided to make the attempt. How nearly this shall fill the requirement, the reader is to be the judge.

There are so many conditions, called disease, which would really become serious, if not arrested in time, "nipped in the bud;" we show how to meet the various conditions and abort their consequences by the simplest methods possible, at the time, and which will, in a majority of instances, forestall them altogether, and also cure them after they have gone into that stage called chronic.

A few fundamental principles will suffice to show how to meet almost all conditions met with in families and individuals.

The reader will please to fix these facts firmly in mind, then, and not till then, can an intelligent explanation be given for the treatment of any sort of ailment whatever. It will be understood that this is a system of treatment which means something, and which is far superior to any other known, in that it is a tried system, and founded upon actual demonstration, based upon the

fundamental laws of Nature—agreeing with Anatomy, Physiology and common sense.

The philosophy consists in removing the irritation from the nervous system, stopping the waste of nerve power, relieving pressure from the nervous system, by the use of special manipulations and in some cases neutralizing the poisons in the body.

That one can be so manipulated as to free the circulation of the blood, stop fevers and relieve pain and inflammation is a fact which has been amply demonstrated in this country. The simplest, easiest and best way to accomplish the purpose, we have tried to show herein; and, when applied as directed, we opine will be found absolutely satisfactory in almost all conditions, and without the least possible harm accruing therefrom.

Headache, Fevers of all kinds, Throat, Lungs, Liver, Spleen, Stomach, Bowels, Heart, Kidneys and Genital organs, together with all the complications of functional disturbances may be and are relieved by the application of this method of treatment herein described, and it is my desire that the reader be not doubtful about results, but try it, use it, rely on it.

Flux, Diarrhoea, Summer complaints of children, Indigestion, Colic, Fits, Spasms, Pneumonia and every known functional human ill is amenable to this manner of treatment. Try it; prove it.

If the reader could form any idea of the wonderfulness of results of this treatment, confidence would be so firmly established that nothing else would ever be sought to take its place.

It is always at hand, always applicable in all conditions, for all sorts of ailments, all degrees of intensity and all stages and in all ages. The union of the two forces about the fourth dorsal vertebra can be made by any one. This is the chief thing that relieves conditions which, sooner or later, cause pain and disease, as it is generally called. These two forces are opposites—Positive and Negative. By the special treatment shown in this book, the excess of the one or the other is lessened, neutralized, and a state of harmony at once is instituted, so that the effects of either secretion—positive or negative—is aborted at once.

Particular conditions existing in any part of the body are easily modified and relieved by the treatment along the spine; over the leash of nerves emerging from the spine and ending where the pain is manifest at the time. In all sorts of pain in the body, there may be perfect relief obtained by the removal of the pressure from the nervous system ending at the spot where the pain is manifest. Remember that the leash of nerves may be remote from the place of pain—and the place to treat for such a condition is where the leash of nerves emerge from the spine, and end in the spot where the pain is manifest.

The nerves which emerge from the sides of the vertebra, along down the spine and in the muscles surrounding the body, as well as in the viscera inside of the body; so that we may accomplish two or more purposes by treatment of the spinal nervous system. Pneumonia is relieved by the treatment of the spine in its upper portion, and the stomach by treatment at the eighth dorsal vertebra, and many conditions of the stomach cured by treatment at that spot. So we might show farther down the spine, as in case of the affections of the Kidneys—by the treatment of the twelfth dorsal vertebra; and the Ovarian organs and genital organs in both sexes at the second Lumbar vertebra. Constipation may be relieved by the adjustment of the first Lumbar vertebra. Chills may be cured at once by a spinal adjustment at the seventh dorsal vertebra. Typhoid fevers are cured by treatment at the fourth, eighth and twelfth dorsal vertebra. The main thing to do is to be certain of giving the treatments strong enough to be effectual, and at the same time not strong enough to hurt or injure the patient; for there is no necessity to over-do the matter, and abort the very thing you wish to accomplish.

The treatment of the various conditions humanity suffers from are all embraced under two divisions—that of a positive and a negative character. Hence, we lay so much stress upon the spinal treatment in the Neuropathic department of this book. Much good is accomplished by the use and application of the directions in Osteopathy, as shown in that department. The main thing to remember is, whichever department is needed

should be applied. If the reader will note carefully all the plates and the nervous plates as shown herein, the suggestion as to where treatment should be made for any condition or affection in the body, will be known. Each nerve filament ends as shown herein, and to affect any part of the body, any way whatever, for good or otherwise, the effect is manifest at the endings of the nerve filaments. Before the various manipulations, seemingly indicated, are made, do not fail to *unite the two forces*, as described in the instructions on that subject. The key to the relief of all conditions called disease, remember, is the *removal of the nerve pressure*. This applies to the *Neuropathic* and the *Osteopathic* departments. To arrest the *nerve-waste* by the uses of the proper correction and wearing of lenses, is applicable to all such waste through over-use of the eyes, and stopping nerve waste from over-use of any organ in the body is as essential to be done as that wasted through the eyes. The principle is the same throughout the entire body, and we insist upon carrying out the principle in all conditions needing attention, for this is the right way, and is practical and effectual. Whatever is found in this book may be relied upon. Each department should be studied and mastered, then the operator will be supplied with sufficient resources to meet almost all the conditions known as disease.

The instructions will be found easy of comprehension and satisfactory when applied. Simplicity characterizes everything said herein, and the reader need not hesitate to use whatever is delineated and recommended for any and all conditions where indicated.

THE CAUSE OF DISEASE.

We would have the reader understand, once for all, that disease is a product. The question is what particular thing caused the condition which produced the product. That may nearly always be ascertained. It may be from an extra amount of cold to a greater or less surface of the body, producing contraction of muscular tissue; this contraction tightens down on nerve footlets, closes the emunctories, or the *pores of the skin*,

retaining the Toxic or waste material, which should be thrown out through sensible or insensible perspiration, poisoning the nerve terminals, rendering them powerless, or incapable of performing normal function; the poison is retained, re-absorbed into the system and produces thereby more or less contamination of the blood throughout the entire system, and we have disease. Disease usually becomes seated in some weak part of the body, and expresses itself through the nervous system, and the character of the disease is more or less dependent upon the locality where the nerves end. If the manifest strength or weakness in any particular part of the body where function seems to be expressed through that organ, be weak, we know that a greater amount of paralysis has been produced than where an increased activity is noticed; for the nerves ending there may be simply irritated and produce irritation of the organ, causing increased activity-function.

Pressure upon a nerve as it conveys its function along the line from origin to its terminus, strong enough to interfere with its *function* at its terminus, will cause a condition called disease.

Whether we have interference with the nervous system at its terminus, along the line from origin to terminus, or at its origin, we always have the effect—disease as the product.

The internal viscera may be diseased in the same way, for whatever pressure or interference takes place in the body, which interferes with nerve influence, separating end footlets causes an excess of the one or the other secretions—called Acid or Alkaline—and any sort of trouble may ensue, and may result in Ptomaine poison, or some milder effect, dependent largely upon what glandular structure is involved.

Disease being a product, and the Neurologist knowing what produced it, he should not be remiss in so adjusting the system as to change the conditions which would bring about the desired result—a cure. It matters not what name the people or the doctors have been taught to call it, the conditions indicated, applied, removes the thing itself, called disease. Neuropathy is the almost universal remedy to apply to change the conditions.

There are certain poisons supposed to be cured by medicines, but we shall wait for the proof. This philosophy is correct so far as all functional conditions are concerned.

With medical men, we find they use one remedy for many so-called diseases; many of them use not over a dozen remedies for the six or seven hundred diseases named in the books—and have better success than those who use the seven or eight hundred remedies. The thing is to know the condition existing; what is the cause, and what will cure it. The thing to do which ends anything, surely, is to remove the cause. Medicines may chemically change conditions and eventuate in a cure of many diseases. But medicines are uncertain commodities at best, and should be used understandingly, and not haphazardly.

The large field which opens out as we get inside the enclosure of intelligence, becomes simple; for there are so many indices which point the way to an understanding of what we are physically, morally and intellectually, that the means become legion for relief.

The incompatibles are generated in our bodies which cause disease; hence, the more we know of our bodies and their relationship to environments, the easier the way ought to be to keep in harmony with the surroundings, and remove incompatibles before they culminate into raging torrents or engulfing maelstroms.

A few simple lessons in this book will enlighten the reader sufficiently along these lines.

SOME SPECIAL THINGS TO BE CONSIDERED BY THE READERS OF THIS BOOK.

Inasmuch as there is a marked degree of indifference regarding the importance of an education, and much waste of time in our common schools, and education failing to educate, we feel it our duty to present a few maxims worthy the profoundest attention. All study worthy the attention of thought, and which should be considered at all, should receive that fixedness of concentration of our strongest, most earnest enthusiasm, and that persistence and concentration which means something, if success

is ever attained in the mastery of it, and to make it indelibly photographed on our memory. A haphazard, casual, unthinking, half-awake mentality never accomplished anything, nor does it do any good for self or anyone else.

Think of the thing earnestly, exclusively, if you want to make progress in learning it, knowing it. If it is worthy your attention at all, it is worthy of all of it for the time being. The exercise of the *will*, with a *desire to obtain a thing, persistently pursued*, will surely be rewarded *with the thing desired*. *Concentration* of the will, *earnestly*, and going at a study with the *resolution of getting it, is the only way anyone ever became proficient in knowledge or wealth*, health or the general approbation of one's self or the community in which he lives.

Whatever is worth doing is worth well doing. To do a thing well is to do it as it should be done.

Garfield said, "Do not wait for something to turn up, go out and turn up something." To be of any use to others in this world, one must know that doing what we ought to do, in every department of life, is the thing that counts. Scattered thoughts spread over space gathers nothing. "If one sows to the wind, he reaps the whirlwind," sooner or later. To be useful, we must *be something ourselves, stand for something, do something*, and that should be well done. If we can not do as much as some others, let us *do our best*, and we shall then fill out our lives with the satisfaction that "we have done what we could." The world needs every individual's aid. "No man liveth to himself, nor dieth to himself" is a Scriptural assertion which should induce all men to be helpers to their fellow-men.

There is an *aimlessness* on the part of so many people in the world that it seems as if they thought nothing, or did not care whether they thought anything or not.

There is an old rule which says, "*Earnest Desire, Confident Expectation, Firm Resolve*—These are the three things which lead to *Accomplishment*."

Much time is wasted in crowding children with too many studies; years of absolute waste of time, loss of energy, and ultimate failure and disappointment of the parents in the edu-

cation of their children. They go forth into the world simply "parrots," without any idea as to how to use any study they have been crammed with, without really seeing the points which they should have been taught to see, while in school.

There are but three things as regards mentality, which remain in this world. They are Faith, Hope, Love.

These apply in all the walks of life, as well as in a religious sense, Scripturally.

Without one has *faith* in a thing, there will be no interest in it.

Without *Hope* of accomplishing something, pursuit would soon be abandoned.

Without *Love* there would be no interest nor desire to do anything for another.

"Faith being the *"evidence of things not seen,"* it must be sought for, and a knowledge of the *things* must be had, before there can be any faith to prompt an effort for them. Hence, as no one knows anything until he is taught, education must be obtained. The things we desire to know must be made a part of us, and in us, to be utilized. Without *teaching* there would be nothing learned. *In this the opportunity lies.* Those who desire to know anything must study; must *concentrate their minds on the thing desired*; make it a part of themselves; *fix it on the tablets of their memory.* and be taught how to use it, apply it. This is education; this is *Faith*.

Hope is a compound of *Desire* and *Expectation*. We must know something about a thing before we can desire it; we must desire it before we can expect to obtain it—ourselves—and if we know that it will be beneficial to us, and make the proper effort in faith, we may surely obtain it, if we seek for it lawfully—that is, along the lines provided for its obtainment.

Without there being any faith, there will be no hope, and without a desire there can be no expectation, and without expectation there can be no possible way to obtain the thing expected. Last of all, *unless we love* the thing we expect there will be no seeking for it; there will be no enjoyment even though we should obtain it.

These are logical, true conclusions from the premises taken, and life is worth living when we have made up our minds to be somebody in this world, and not until then.

To live along in a careless, aimless way is not the way to live; for he who is a drone, should be driven out of the great hive of life, and die as the worm, and rot, unknown, unwept and forgotten. Resolve to be something in this world, and work to that end all the time. The only people worthy of a name are those who strive to be somebody. This busy world needs men and women whose lives are a continual feast, and devoted to helpfulness in all ways possible for them to help, doing all the good they can, in all the ways they can, for all the people, who need, they can. The Golden Rule should be engraven on the heart of every human being on earth: "As ye would that men should do to you, do ye even so to them." This is worthy the highest regard, the profoundest consideration and the most earnest desire implanted in every human heart, for all time.

THE APPLICATION OF NEUROPATHY.

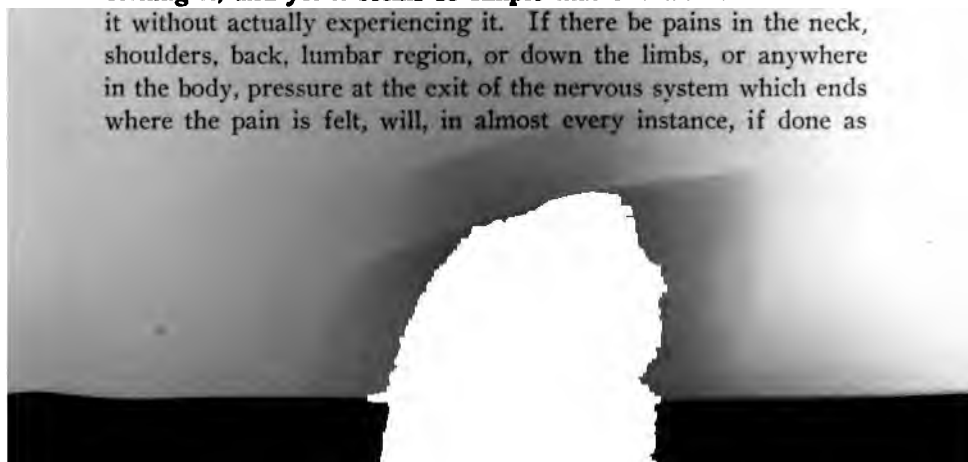
Recognizing the fact that two forces are to be considered in all movements to adjust the spine when treating the patient for any ailment, we should aim to unite them so that harmony of action at once begins, and this is done by the hands along the spine, so placed as to bear down suddenly at given places along the spinal column. The position of the patient to receive treatment is an important consideration; for adjustment can not be properly done without this being strictly considered, and in all treatments. In order to be in the best attitude, the patient should lie on the front of the body, the breast elevated on pillows so as to be off of the bench which is used to treat on, and under the thighs there should be enough padding or substance to elevate them at least as high as the head, leaving that part of the body between the hips and the upper part of the chest free from support — as it were, suspended above the table, and in a condition that patient can be sprung downward in any attempt to press on the spine suddenly.

Having this position established and certainly fixed, the operator should be elevated at the side of patient high enough so that he can throw his weight downward on his own hands, which he places on the body of the patient — on or at sides of the spinous processes; one hand resting flat on the palm on back of patient, as seen in cut, and the other hand on the back of it; and now he stiffens the arm of the hand which immediately comes in contact with the body of the patient, and with the aid of the other hand and arm suddenly presses his weight upon the body of the patient where the influence is to be exerted on the spine, and if the movement has been done properly, a sudden clicking will have been made, audible, most generally, to both patient and operator; then

proceed to another locality of the spine, and go through the same process in the same manner; and this is to be repeated along the spine wherever treatment is necessary. The clicking mentioned may not always be distinctly heard, but in most instances it will be, and an immediate effect will be felt by the patient, for that loosens up a seemingly tight, compressed bound feeling, which enables the patient to breathe easier, and the forces seem at once to start up which have not done so before, and relief at once ensues. The perfectly relaxed state of the whole body of the patient conduces to the better effect of the patient as regards relief, and should always be enjoined at each treatment. The neck may receive the same movement, either from the side or back of the neck, securing the steady position of the head in one position while the treatment is being done.

The application of this peculiar pressure has a far-reaching influence, for it not only starts up dormant forces locally, affecting the terminal nerve filaments, empties the terminal capillaries, but unites the positive and negative forces, which neutralize the acid and alkaline elements, and harmonizes the system with itself; but increases the flow of all of the fluids in the body, so that the various functions are started into activity, relaxing the muscular fibers and lessening the tension, so that the veins and lymphatic tubes are permitted to empty their contents, and stimulates all the nervous system to activity. The change at once begins, and the tightened feeling at once gives way to relaxation, and a comfort indescribable ensues. The pressure seems to, and does, give way; breathing is easier, and all the functions involved assume their wonted order, and pain lessens or ceases at once, and hope revives; the thoughts change from despondency to hope, and health begins to take possession where disease held sway only a moment before.

There are so many effects connected with this treatment that a volume would not hold all that might be said about and concerning it, and yet it seems so simple that one would not believe it without actually experiencing it. If there be pains in the neck, shoulders, back, lumbar region, or down the limbs, or anywhere in the body, pressure at the exit of the nervous system which ends where the pain is felt, will, in almost every instance, if done as



directed above, relieve it as if by magic, many times at once. The effects, remember, upon the nervous system are felt at their end filaments, and as nerves end everywhere in the body, we must know that the nerves we desire to relieve are accurately located, or our treatment may have no effect upon the pain. The understanding of the origin, exit and course of the nervous system involved has everything to do with the effect we desire to produce. It is not simply "a punch in the back" that does the work desired, but the nerves liberated are the ones which produce the effect desired, or which relieve the pain or disease. The force must always be in proportion to the rigidity opposed, and should never be too severe, for the freedom of the nervous system is easy when you know how to manipulate.

When the operator applies these adjustments properly, and uses the proper force (which will be soon attained), the treatments will be easily and quickly done, and confidence established. The operator, be it remembered, will do no good unless the directions are carried out as stipulated. There should be no timidity, but the force should be sufficient to accomplish the purpose intended, but rashness should always be avoided.

When the proper table is used, there need be no propping up of patients, for a comfortable posture may be had by the patient with the spiral springs under the abdomen and the chest as far up as the middle, or even to the upper part of the chest, to the clavicles, or at a point where the operator may best secure effective adjustment. The part of the body which is to be treated should rest over the part of the table where the springs are, and the upper part of the thighs rest on the solid part of the table, below where the springs are placed, and let the head and upper part of the chest rest on the table above where the springs are, lying on the table with abdomen down and the head facing from the operator, and being as much relaxed as possible, and then the treatment will be easy and effectual.

SUPPLEMENTARY HINTS AS TO NEUROPATHIC MANIPULATIONS.

If the student will take the pains to examine Eales and Tabor's Encyclopedic Chart under "Nerve and Blood Supply,"

the various plexuses will be found, and the various centers for Osteopathic Treatment for various conditions shown. He will get a good idea of where to treat the spine to get neuropathic effects of treatment, and all of the delineations may be there seen, so that any condition may be intelligently relieved by treating the particular plexus involved, without going over areas which are not involved. It should be distinctly understood that, if a given condition exists, certain nerves are involved, and these deserve attention; and without one knows which nerves are involved, and where and how to treat that particular leash or filament where the pressure is, and remove it, the difficulty will remain. In many conditions one treatment will not be sufficient, for the reason that many nerves may be implicated in a given ailment, owing to the complication of functions in the parts being controlled by the various nerves ending near the impingement of the nerves which control the parts individually under special control; and several treatments may be necessary to accomplish what is aimed at, and the nerves ending where the treatment is being given may require treatment as well, so that to assume that positive results will occur as a result of any one treatment is to assume what may not pan out at all times.

This system of treatment is one which requires much thought and quite extensive knowledge of the nervous system, to be successful in the treatment for the many and varied conditions called disease. It should be indelibly fixed in the mind that the nerves are the media through which mind is conveyed, and that no part of the body could have the sympathy of any other part of itself without nervous communication, and it should be further understood that the nerves which go to and end in a part must be free from origin to terminus to carry intelligence and directions from the head-center, the dome and headquarters of thought, in order to convey, unmolested, directions concerning the arrangement and order essential to the removal of waste tissue, the rebuilding of new tissue, combining elements so as that every element shall have its proper proportion of the normal material necessary for that particular locality, so that harmony may exist there, and not only in one particular part, but in every department in the entire body.

When the student shall have compassed the magnitude of this science, and shall be well enough versed in the nerve supply of each and every part of the body, and know what particular leashes of nerves are involved in any and all given conditions called disease, and know how to adjust the various parts of the body so that harmony prevails and health is restored, his services will be worth something to humanity, and he will be justly entitled to the name Doctor.

THE TENACITY OF PROFESSIONAL ERRORS IN ALL LINES.

It has been stated by some one of considerable observation that "the medical profession know less of their business than any other professionals," and the application of their so-called science seems to justify the assertion, and a closer observation and investigation would doubtless confirm the truth of the statement; for what does the average doctor in the several schools know about medicine, disease, or the anatomy or physiology of the body he administers his poisons to? What does the average man know of the nervous system? The large majority of the medicine vendors know but little of the human organism, and know a great deal less of the medicines they impose upon their helpless victims. The profession has become a trade, and medicines are dealt out for so much a dose, or so much a visit is charged, so much a prescription, and the patient pays for the filling of it beside,— and all this is a matter of education! The people think it is right, just the thing to do, and the impression is rife that a physician is a necessity, medicine is a necessity, and that when one takes ill, feels a little out of fix, medicine is the thing he must have to get well! The one who has become wearied and worn out by the observance of failures of favorable results of the use of medication, refusing to send for a doctor, is looked upon as heartless, a fanatic or a villain; so that forced environments and false education have fixed a habit in the minds of the people a little less than criminal,— and in many cases it is so. That every one who is afflicted needs the care and attention of his brother man, no one of feeling and educated consciousness would question for a moment; but it does not

follow that medicine should be imposed upon the one afflicted. That, having been shown to be an uncertain commodity, it makes it questionable whether benefit or harm will result from its use; and when there is a certainty of relief without drugs, it becomes a criminality to compel any one to accept of, and depend upon, such a commodity, especially when it is an incontrovertible fact that medicines kill more than pestilence, famine and sword combined! Is it not time to call a halt on medicine and to look upon its administrators with "sharpened, sly inspection"? That medicine has proven itself inadequate to meet emergencies as well as to satisfy the general demand, the various pathies and schools and healers fully show, for, if medicine could have been depended upon, nothing else would have been tried. The dependence has been a forced dependence, a sort of unexpected expectation of hopeful, favorable results; for it is a fact that organic troubles kill, and functional disorders with medicines often become worse, and frequently are made worse and kill the individual.

THE REMARKABLENESS OF THIS SCIENCE.

That a simple movement in the spine at a particular spot, seemingly not differing in its contour from any other along the spine, should produce such a change in all of the relationship of the entire body, seems almost incredible, and yet such is the case. From a racking pain, that almost drives one to insanity, come the calmness of a May morning, and the tranquillity of the flowing of a gentle brook. This is not only the case in a single instance, but there are no less than thirty-one such places from the atlas to the coccyx, where adjustments may be made with astonishing results,—the cripple is made to walk and the lame man leap as a freed slave from long bondage. No wonder that such treatment has become so exceedingly popular with those who have witnessed its marvelous results.

People have gone thousands of miles to receive some supposed wand from some secret force, wrapped up in some cabalistic word, and returned home happier by the long journey; but the one favored with this wonderful treatment has been the recipient of a

natural adjustment in a shorter time, far more salutary, for it removed a real difficulty, whereas in the other it was simply a change in the thought which seemingly wrought the result.

Mysteries have been sought from time immemorial, but there is something enduring in this which needs not the mantel of mystery, enfolding it, to hide its merits, and it only needs to be seen or experienced to inspire perfect confidence, and the mystery vanishes like frost before the direct sun's rays. All that is necessary to know is, what particular nerve, freed from its impingement, permits nature to resume her wonted work, and harmony at once become established and order assume its place! All things are mysterious until revealed, and whilst the necessary movement to restore harmony seems peculiar, the mystery is in knowing why certain nerves are influenced which result in the change. Assuming that the nervous system is the medium through which the mind controls the body, we are to conclude that some interference with them had existed prior to the movement that prevented the normal coördination of the elements, and as soon as this was established, the results followed. This condition may continue for a longer or shorter time, and whether longer or shorter, makes no difference as to results. The pressure removed, all is righted. The study of the causes of the pressure is a consideration which needs some thought as to how such conditions occur. Dislocations or luxations are not necessarily the causes.

THE APPLICATION OF NEUROPATHY.

To be effectual in arresting any complaint in the body it is essential that the two poles be united, for this done, harmony at once supervenes. That nervous irritation produces contraction of the substance in which nerves end, we see in the contraction of muscular fiber where nerves terminate, (all effects of nerves are at their ends, either at their origin or their terminus,) and hence we have a certainty of tracing the source of irritation, and this assures us of the how and where to remove the irritation, pressure, or whatever is doing the thing we wish to stop. A nerve becomes one of the controlling influences of the body wherever it ends;

there its influence is felt. Whether that filament ends in a lung cell or in a gland, its special function is expressed either in dilating a blood vessel or extracting a secretion of some sort from the blood. An interception of the communication along this fibrilla effects marvelous changes in the structure where it ends. The influence upon the part depends upon the special function of the nerve, whether it be sensation, motion or sympathy; and be it known that nerves end everywhere in the body, and the mind, through them, controls all the functions of every part. Through these nerve filaments harmony exists, or the greatest commotion possible takes the sway, and all the modifications possible to imagine between these extremes, depending upon the amount of power needed to express the thought sent through these filaments.

Whether we be dealing with effects or causes, the relationship is so blended that we are often at a disadvantage as to the certainty of the one or the other — cause or effect. To unite these forces which determine results has cost much thought to systematize, so that effects might be satisfactory. That we have accomplished much along these lines we know from the fact that effects have been most satisfactory and oftentimes magical in a superlative degree, far beyond our highest imagination, and yet it is so simple that one would not believe it without seeing it done and watching the change for themselves. From a skin eruption to a typhoid fever and a puerperal peritonitis, we have seen these go as if by magic at the touch of the right nerve, and the patient scarcely realize what had been done. The marvelous effects of nerve action, in the union of these two forces, is beyond conception, and needs to be seen to be believed.

THE DIFFICULTY WITH THE MASSES AS REGARDS CONFIDENCE.

The diversity of human character has its origin in two states, prenatal and postnatal. Prenatal is denominated hereditary, and postnatal acquired. The term "hereditary" to me is a misnomer so far as parental inheritance is concerned, for inasmuch as the mind is made up—that is, the faculties are formed—by the thoughts of the mother, but these are the results of environments, which are external, outside, nevertheless through suggestions from the outside world the influence is carried to the embryo in utero-gestation, and whatever fund of thought permeates the physical organization of the parent, maternally, directly is carried through the circulation into the foetus, and becomes a part of the new (being) formation, and thus, even at the very introduction of the infant into the world, we see the variation in the size of the faculties of the child; and then comes the environments, the training, the new relationship of the new-born, and the particular suggestions, and the manner in which they are made, we find the bent of the mind directs the character and life of the individual. That the suggestions are varied and diversified beyond computation, any one at all conversant with facts as they present themselves in the checkered scenes and experiences of mortality knows something about, for they are legion.

That every one is inclined to go in the direction of the strongest incentives, the strongest desires, and where there is the least resistance, is conceded. Accepting this conclusion as an axiomatic standard, we deduce therefrom some principles which deserve our special consideration. Assuming that God has created the "germ" primarily (and countless millions which never come to our perception), and through a process known as conception, it is placed in a soil to be developed, we assume that from that moment the

influence begins which culminates into the future human being, and that whatever the influence brought to bear in the maternal thought, due of course to suggestions from without, and the influence of the will and controlling faculties of the mother, so will be the child at birth; whether a well rounded out cranium with a due balance of contour, indicating a balanced brain, hence a normal development of all the faculties, or perceptible prominences in certain localities, indicating increased size in some and non-developed faculties in other regions of the cranium, there they are, and something has caused this difference, judging from the character of various persons with all these differences of contour of the cranium, which any one can verify by examination and comparison, for it is certainly a fact.

That we have special characteristics manifest in every individual, observation proves to the most skeptical, and why not be able to account for it? That there is a difference in the development and size and shape of the human skull, and each has a different character, manners and inclination, all know to be an undeniable fact. There must be a cause for all this variety. What is it?

It is the history of the ages that every individual desires every other one to be conformable to their particular standard, and hence inclined to throw around the other fellow such influences as shall induce him or her to accept their suggestions and to conform thereto, believing that such suggestions have a power in them of molding the character or habits of the other fellow into a course which will be harmonious, for inharmony seems to be the bane of the human race, and every one is using all the influence possible to harmonize all other people, but especially in his or her special way. Where did this condition originate? We answer, in the development of certain faculties, perhaps in embryo, and postnatal suggestions developed the faculties which longed to be gratified, and hence the diversity of human character. Whilst this is a result of ignorance on the part of those who had to do with the environments of the individual, nevertheless the results are undeniable. The remedy is in knowledge of the power of suggestion and the how to develop the human faculties.

Every fully developed human faculty, with its leaders, shows forth in the life of the individual certain traits of character as certainly as that man exists. Ages upon ages have gone into the eternal past, and the revolving years continue, and mankind continues to repeat the sad history which involves nations in strife, war and carnage, and all because the power and influence of the faculties are not understood. History repeats itself simply from the fact that humanity is molded in the same mold, adheres to the same environments, subject to the same influences, and, per consequence, the same class of people are developed all along the ages. These particular influences conduce to produce all the antagonism, strife, disease, debauchery, sin and misery that we witness in every-day life, and will continue as long as we continue the same sort of seed-sowing.

That humanity should be thus environed seems the strangest thing in nature. That we should continue to repeat the same things over and over, when a moment's reflection shows that "as we sow we reap," why not sow different — different seed — knowing that the soil is all prepared ready to receive and grow the seed sown, and develop a different character from what is manifest, and has been for ages, all due to cultivating certain faculties which rule in the wrong direction? The world has been trying to abolish sin for ages, and yet has never considered why sin is so hard to remove. Change the suggestions and thereby change the inclination to gratify certain faculties, and the results will be accordingly. Change the suggestions and you will cause wars to cease. Change the suggestions and vice and immorality will be disgusting. Change the desires and you will develop the faculties which lead to morality, humility, generosity, toleration. If "as we think, we are," why not think right? Then we will be right, for thinking right develops all the faculties needed to make one act right. No one can go in opposite directions at the same time. "Make the tree good and the fruit will be good" is a maxim worthy of the profoundest consideration.

That individuals are loath to accept anything not in accord with former teaching is apropos in this science. The people for ages have been educated along the lines of medical dosing being a

necessity to cure disease, and are molded in that thought, so that it is hard to convince them that the old way is faulty, and that something else should be investigated, tried, compared, adopted. That disease should be aborted by any other method than has been in existence for centuries, notwithstanding all of its signal failures, can not be true. That nature has placed within every individual all the elements essential to his well-being and happiness has not been considered by the masses, and that a disease is a result of unbalance within one's own self, and not generally due to something outside of the body, such as malaria, bacteriological microbes, is so different from the present-day theories that it seems as strange as fiction and as wonderful as truth itself!

Confidence along the old lines is simply habit, and not due to investigation. Whenever the masses turn their attention to themselves, and think how much they have suffered, how long they have tried medicine without relief, they will begin to realize that it is worth while to consider whether their condition is likely to be bettered by continuance in the old way. That medicines are foreign substances, no one with an idea will question. That medicines are indicated in any case is hypothetical, to say the least of it, and hence questionable, whether it ought to be taken into the human system at all.

That the most astonishing results take place within the body as a consequence of adjustment through this method called Neuropathy, no one who ever witnessed its effects will contradict; and that it is applicable to the most serious and the most malignant conditions is a matter easily demonstrated. Confidence should be had in a system after a successful application of it for six years under an adept in the science of healing, and one who has passed the curriculum of the best medical colleges in the country, who, with long years of experience, ought to be able to compare methods and ascertain their distinctive merits.

It has been a great sacrifice of time and means to bring out a science from chaos and set it forth among the needful things of the age, and which bears the closest scrutiny possible, and stands forth with the brilliancy of light that dazzles human thought with both wonder and admiration! It is *truth*. Confidence, neverthe-

less, is slow to yield, but time will afford means which breaks down all barriers when Neuropathy will have sway with the people. The freedom of thought comes with freedom of the nervous system; so does health. This is the science which embraces all of the nervous system in treatment. It includes Ophthalmology as well, hence Neuro-Ophthalmology is its name. It includes the cerebro-spinal nervous system, removing all strain and pressure, and therefore embraces every functional condition that affects humanity.

THE FORCES.

THE TWO FORCES WHICH CONTROL THE BODY.

What these forces are, and how they originate, are the most difficult problems to solve.

That the functions of nerves should be changed by pressure would seem reasonable, but what particular change takes place in the structure which makes the difference in the product of the secretions is the most abstruse problem, perhaps, we have to do with in the way of solution.

A POSITIVE AND A NEGATIVE INFLUENCE.

The wonder of all wonders is, how this nervous system so minutely differentiates between a secretion manufactured, as it were, by one set of nerves, and that by another set. In our experience with so-called pathological conditions, we find that certain conditions follow the impingement of, or interference of, certain nerve filaments which do not follow impingement or pressure upon certain other sets of nerve filaments, and this fact brought us to an investigation of the subject never attempted in all the realms of pathology. That certain influences upon the nervous system in certain localities produce drawing, excruciating pains is an established fact needing no testimony from any one to prove. That pressure or impingement upon certain other nerves is not perceptible as regards the sensation is also a well-known fact; but why certain influences produce in one set of nerves a chemical result just the antipodes of others has not been observed outside of my own investigations, and why this is so I pretend not to explain on any hypothesis whatever, except it be to fulfill the demands of nature itself in the human economy, and make it harmonize with

all other things in nature. This much conceded, we would be understood in this proposition as assuming that the nerves which go to and end in the abdominal viscera have for their function the generation of acid secretions, and those nerves which pass down the spine through the foramen magnum, and constitute the splanchnic nervous system, have the opposite effect, and their function seems to be that of generating an alkaline secretion.

The discovery of these two divisions of the nervous system opened up a new field for study, and let in a flood of light upon the question of the causes of the various conditions known as disease — pathological conditions — and presented to me an entirely different view to that of the commonly accepted theory of disease — its causes, etc. We assert that all diseases are traceable to a disturbance in some way of one or both of these systems of nerves which we denominate the positive and the negative forces of life. We assume also that, without the coördination of these forces, the whole system is in a state of unbalance, is out of harmony with itself; and however slight the discrepancy, there is always to be found the cause in one or the other of these different divisions of the nervous system, and that, when righted, united, the effects then perceivable cease at once.

That the leashes of nerves which constitute the so-called solar plexus produce the acids, and that the leashes or bundles of nerve filaments which make up the spinal cord and go down the spine, constitute the negative force, and generate the alkaline secretions, we have every reason to believe are the sources of said secretions. Demonstration resulting from a series of experiments proves that removing impingements from certain localities along the spine at once arrests the flow of alkaline secretions, and the result, in my opinion, is, verified by many observations, that the two forces, when united, neutralize each other, and harmony is at once established and a state of health ensues.

These fundamental principles being fully elucidated and properly applied should make a wonderful revolution on the present theories of the causes of disease, as well as the manner of ridding humanity of the ills of life in the matter of disease, and cause abandonment of the use of foreign substances in the

form of medicines to cure them of their ills. That this system, together with a knowledge of how to remove nerve strain, will become the established method of treating the various functional disturbances of humanity, we verily believe; but prejudice and ignorance will have to give place to knowledge and honesty.

A FEW FACTS CONCERNING THE FORCES.

That the force or power which controls this body of ours should be somewhere is self-evident; but what that is, we are as ignorant of as if such a thing did not exist. We only know that something we call *power* controls the body. That mind is the thing that does it, we are reasonably sure of, or is in some way connected with it; but the how it does it will most likely always be a profound mystery. That something permeates, goes through, and seems to be disseminated throughout every individual and infinitesimal atomic cell of the body seems to be a fact so palpable that to deny it would be unreasonable; to suppose that such a wonderful structure as the physical man should be renewed from infancy to old age with as much precision as mathematics could calculate, and reproduce itself with such minute and unvarying precision in such infinitely compatible nicety, arrange the chemical elements so as to furnish adequately the exact quantity needed everywhere in all the various parts of the body, so that such a complicated masterpiece of mechanism should dwell together in such a tranquillity for so long a time, and in such a variety of constituencies, and be controlled with such exactitude, seems utterly out of the question, or that accident should be the cause. That mind does the work of arranging all this, we are thoroughly convinced; for without it all would soon be confusion worse confounded, inextricable chaos would characterize it, and mind would be compelled to leave it as a dwelling-place, with not a trace to record whence it came or whither it goeth. But when we assume that mind pervades it in all its parts, we trace its workings in successive steps and perfect orderly arrangement, so that the miracle of existence and life are manifest and intelligently expressed.

MIND IS EXPRESSED THROUGH THE NERVE FILAMENTS.

Starting in the calvarium—from the forty-two nerve centers—mind goes out and selects an element from the blood,

through the capillaries, and leaves it where needed, to fill up the deficit caused by exhaustion from use, and carries out the means used, as in all other parts, to renew the elements, all these being drawn from the blood, all the blood having been manufactured from the food eaten; and after being made up of elements and carried—forced into—to every end vessel or capillary, through the arterial system, whether to normal, muscular, or glandular tissue, the changes go right on and the great storehouse of this cosmic laboratory is superintended so systematically and orderly that no mistakes ever occur, until some ruthless hand, or ignorant mentality, interferes with the general order of normal procedure, and in some way intercepts the communication between the origin and terminus of the vessels which we denominate mental conveyancers or communicators, and then there is confusion, with all its direful consequences. It is essential that harmony prevail in order that no increase of incompatible elements result from chemical changes which result from stasis, stoppage or sluggishness in the movement of the fluids of the body in their rounds through the channels especially provided for them to pass. This causes change; for all the elements in the body are chemical elements, and held in solution by the fluids of the body, and these fluids themselves are chemical compounds, influenced easily and constantly undergoing changes; but these are natural changes, when not intercepted or interfered with anywhere along the lines of transmission from one part of the organism to another.

The heat of the body is kept up to almost an exact temperature of $98\frac{1}{2}$ degrees from the embryonic stage of life to the "sear and yellow leaf" period, when the "evil days come"; but the changes culminate disastrously because of interference with these channels which convey the "vital fluids" and the mental communication through their wonted conductors. Strange that a harp of so many strings should keep in tune so long, when so many play on it and use the strings so roughly! That harmony is the normal status, we verily believe. We, either through ignorance of the vastness and intricacy of this wonderful structure, touch too harshly the vital thread, and cause dread and gloom to pervade the "temple not made with hands"—the house we live in—or permit some one else to, and suffer for it; or some armed

foe invades it, and we permit it to return to the dust, "from whence it came," prematurely, or suffer from ignorance of the how to harmonize it when out of harmony.

AS REGARDS THE CONTOUR OF THE SPINOUS PROCESSES.

The spinous processes will be noticed to vary as to contour in many conditions, which it is well enough to know about, the cause and why we aim to regulate them in our treatments. In most instances we find a prominence in the vertebra where we find a difficulty or a disease point—or a soreness of the part of the spine, and this is caused by pressure upon nerves ending there; and they may be the first filaments, which start off from the leash which emerge from the spine at that spot, or they may be nerves ending there which come out of the spine higher up the back. It is well to use gentle pressure above and along the vertebra until the tender spot is located, and treat all tender spots found at each seance. The prominences are made by the irritation of the nervous system ending in the muscles attached to the process, or sides of the process, whence we find the prominence—most generally. Thus we discover that it is altogether a nervous condition we have to treat, and not bone.

WHEN THE REVERSE TREATMENT SHOULD BE MADE.

The reverse course of treatment should be made in cases of diarrhea, or to stop discharges from the uterus. The way to do it is to begin the treatment down at and just above the sacrum, and let a strong treatment be made there, then one a bone or two higher up, then the next one higher, and so on until the second lumbar has been reached. A really better way is to place one hand at the junction of the sacrum, and with the other pull upward and backward one of the limbs—or both at the same time—using strong pressure on the spine low down, holding patient in that position a half a minute; let body be a moment and then repeat the process, placing the hand on the back a little higher up, and so on for three or four times, ascending the spine to about the second lumbar vertebra; then let the patient lie still for

a short time, the operator using gentle pressure on the abdomen for three to five minutes, pressing backwards and upwards, aiming to stop peristalsis for a time.

HOW OFTEN TREATMENTS SHOULD BE GIVEN.

The treatments should be given every day, in ordinary cases (for chronic ailments, every other day), and not hard enough to make the spine sore. In acute cases treatments may be given daily, or twice daily, so as to keep up the neutrality of excesses of positive and negative forces. As these treatments are the most salutary of any treatments ever devised, they should be modified according to the case under treatment; whether it be one who is quite weak or one strong and robust, the treatment should be accordingly, and the operator should know his subjects well enough to make his applications adaptable to each case.

There should always be a proper position secured for the patient, so that no harm can come of the treatment, however strong it may have to be done, to accomplish the object intended. Whenever the neck is to receive treatment, the body should be on a level therewith, and the head placed so that it will be stationary, and then the treatment should be done with the side of the palm of the hand.

THE GENERAL TREATMENT ALONG THE SPINE.

Whilst there are vulnerable points along the spine to treat, we should know that certain regions have specific control over certain parts of the body, and these are effective in a specific sense at once. The treatment of the neck — about the fourth cervical — affects the head as well as the immediate locality treated. Head-aches and all pains in the head and jaws are affected by the neck treatment, whether toothache, earache, nose-bleeding or catarrh. Then there is another important locality farther down along the spine, stopping at the fourth dorsal. We find a treatment at this fourth vertebra affects the bronchial tubes, lungs, and all of the upper chest region, embracing the heart, and extending to the stomach as well. At the fifth dorsal we strike the splanchnics, and treatment here reaches the posterior part of the solar plexus,

and a union of forces is made through this splanchnic nervous system, which, when in excess of action, and the pneumogastric system is deficient in action, we are confronted with boils, sores, skin diseases, and typhoid fever, peritonitis and all inflammatory conditions of every known character; and all are treated along the spine, and especially in the area from the fourth dorsal to the first lumbar inclusive; for we reach all of the internal viscera through these splanchnic nerve plexuses, and a connection with the lower abdomen, as well as the lower limbs, and the digestive system is wholly controllable through the splanchnic nerve plexuses. Here is where we treat for all abdominal affections, such as indigestion, liver, spleen, pancreatic disturbances, and every disease controlled through the splanchnic nervous system, whether affecting the positive or negative side of the body. So that here we have a vast field of operation, and the study of the nervous system and where these nerves end, and what particular organs they control. This is the real seat of a vast area from which radiate a system of nerves which constitute the negative forces which have to do with all kinds of diseases which tend to suppuration; and here also we are to treat for all abdominal disturbances as well, for the system is under control of two systems—a positive and a negative—and through the spine we unite these two forces and get our marvelous effects in the amelioration of such a variety of so-called diseases.

When we comprehend the various ramifications of the nervous systems we have to deal with, and which influence such a large part of the body, we shall somewhat comprehend the vastness of the influence of our treatment in this area; for here we control the two forces which have to do in all of the diseases to which the human family are addicted.

Whether we regard the two forces in a special or a general sense, we find that nerves ending in certain localities seem to have control over certain organs, and affect them through certain leashes of the spinal nervous system emerging from certain foramina along the spinal column. The nerves which end in, and control the functions of the kidneys, are affected by treating the last dorsal—the renal splanchnic ganglion—and whatever

abnormal condition is found, due to any action of the nervous system which control the functions of that organ, seem to respond at once, and the normal function is restored thereby. It will always manifest a tenderness in that region whenever there is any difficulty in the kidneys, and the treatment relieves the soreness in that locality, and rights the wrong existing beforehand. The first lumbar seems to be a connecting link between the kidneys and the genitalia.

The second lumbar vertebra has emerging from its sides the genito-crural plexus of nerves which have special control of the genital nervous system and the crural sheath as well; and here is where treatment is made for all affections where the genital nerves are involved, where the genital weakness is found to be aided, and the normal condition restored from abuse or excessive indulgences, and for many cases of nocturnal enuresis, as well as female ills, irregularities and painful menstruation and amenorrhœa, and uterine difficulties of all kinds and conditions; for here we observe the effect of uniting the forces more positively than anywhere else. Here is where puerperal fevers are aborted at once and absent menses are caused to appear, leucorrhœa aborted, and all uterine action seems to take on a change at once from these treatments, and a normal condition ensues in almost every instance.

The third and fourth lumbar plexuses seem to have special influence over the lower limbs clear down to the toes, so that in all diseases and pains below the hips it will be necessary to treat as far up as the third lumbar vertebra to get salutary effects from treatment. Whilst it is true that nerves end everywhere along down the spine from where they emerge from the foramina, we should be sure we treat high enough up to reach the impingement of the nerves involved in the condition for which we treat the patient, remembering that the pain does not originate where we feel it. It is in the end nerves where the pain is felt, and we should always remember that to relieve the pain we must relieve the pressure from the nerve or nerves involved in the production of the pain. This is a nerve-relieving treatment, and no haphazard guess-work should be indulged in; but seek for the seat of the trouble and free that spot.



Sympathetic Nerve Centers, to Obtain, from
Peripheral Influences,
The Salient Points of Impression.

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SPINAL NERVE TREATMENT (OR ADJUSTMENT) FOR SPINAL CURVATURE.

CURVATURE.

In giving the treatment for spinal curvature, always treat at the beginning of, or ending of the curve, and make the adjustments at these places, gradually liberating impinged nerves, and freeing the irritation of the muscles which pull on the concave side of the curvature. In the treatment of spinal curvature at the eleventh and twelfth and first and second lumbar vertebrae, it should be remembered that there is danger of producing an inflammation in the psoas muscles, and producing psoas abscess, if the treatment is too harsh — severe. The reasons are that the muscles originate about this point, and are easily irritated; so it is necessary to be mild in the adjustments of curvature in this locality, for cautious and careful treatment is better than rough treatment, even if it takes longer to get results.

In all of the adjustments of the spine it should be remembered that every move means a great deal; for here we have the leashes of nerves which end in and control the larger part of the body. In the cervical area we have influences started which affect all the nerves involved where these nerves end, and that it matters much with the patient how treatment is made; for here we influence the brain, the spleen, stomach, liver, heart, diaphragm, lungs, and a large per cent. of chest muscles, through the nerves emerging from the foramina in the cervix.

It should be a matter of profound study and earnest consideration in our treatment in every instance, and in all cases and conditions; for we start forces by relieving impinged nerves which end in and control the muscular system and secretions in large

areas; and the nerves are so widely and variously distributed that one with a meager knowledge of the distribution of the nervous system has but a faint conception of the influence produced by a simple adjustment along the spine. This is not a system of "punching in the back" merely; but if one in any degree comprehends the far-reaching influence of the adjustments we have endeavored to teach, there will be a disannulling of the idea of just a "punch in the back" to cure. It is not a haphazard business, for the intelligent understanding of the application of it answers the purpose to relieve pain and arrest diseased conditions with the certainty that does not characterize any other method now known.

Whilst there is, in the spinal adjustment, a union of the two great forces which control all conditions in the body, there are, in the several localities, effects peculiarly characteristic of the functions of each and every nerve filament. For instance, if the lungs are affected, the area of the upper dorsal will be the region which should receive attention; and if the internal viscera are involved in any way whatever, the splanchnic area, from the fourth to the tenth dorsal, will be the area of special importance to consider, and especially in cases of typhoid fever, the adjustment will be required at the fourth dorsal, and down to the eighth; for in this area we have nerve filaments which superintend and influence, as well as control, the abdominal viscera, so that the liver, stomach and intestinal canal are affected by the adjustments anywhere in the splanchnic area. At the eleventh dorsal, the female organs are affected, and on down to the second lumbar vertebra, so that to know how to adjust the spine for given conditions the nervous system should be carefully studied.

The twelfth dorsal area is of the most importance when there are kidney troubles; for it is from this area that nerves emanate which control the functions of the kidneys; and when the proper adjustments are made in this region, much good results, and many diseased conditions of these organs yield with surprising quickness and most satisfactory results.

About the first lumbar we get results from chronic constipated conditions with marvelous rapidity, and the proper treatment

there is better than a physic, for it is generally lasting. Then we pass on to the second, and there we influence the genital organs for good, often relieving chronic ailments which have stood the fire of medication without response for years; so that we mean something by this spinal adjustment treatment, and no one is properly a scientific manipulator who does not understand how to adjust the spine, even if all taught by Osteopaths has been applied; for there is nothing comparable in osteopathic manipulations which so effectually accomplishes the purpose as this does; for no one in Osteopathy has ever known how to apply these treatments but those who have taken special instructions therein. And the science was never explained in a rational manner before so as to be understood.

Any one who will carefully study the nervous system which emerges from the spine, beginning at the base of the skull, and follow the terminal nerve filaments to their endings, and see what their special, individual and general functions are, can not help but be imbued with the importance of their place in the human economy, and their relationship to functional control of the various parts to which they go, and in which they terminate (for be it understood that nerve influence is observed only at the beginnings and endings); so that a special consideration of their perfect freedom is of the first and greatest importance to consider.

Whilst the "life of man is in the blood," the control of every element in the blood inheres in the nervous system; for the nerves are the media through which mind controls, they being so arranged and distributed that every molecule in the body is, in some way, connected with nerve endings, and every capillary and every pore in the walls of all the capillaries are in direct contact with the endings of these nerve footlets, and through these all direction is made as regards execution of function in every part of the body. So we see that Nature has not been remiss in caring for this body of ours, intelligently and constantly, from the very incipiency of vitality to maturity and the decline of old age, constantly superintending every department of the great house in which we live, and seeing to it that every detail is carried out

with the most unerring precision. The influences which control this body may be indexed by any one who cares to study the anatomy of the nervous system and trace its filaments to their various endings. This constitutes the kind of intelligence necessary to be adept in the application of this science. It adds to one's ability in Osteopathy as well, and places one in a position to relieve suffering humanity under any and all circumstances, and qualifies the individual to understandingly ameliorate suffering.

Those who simply guess at causes, and guess at remedies, are acting unworthy any profession. There will never be a time when this science will not be in demand; for it applies to all conditions where the nervous system is involved, and when intelligently applied, will do good. We earnestly suggest that every one who claims to be a physician in any sense be posted in the knowledge of the anatomy and functions of the nervous system, so that success may stand out and be achieved, and all who receive this treatment may be absolutely benefited thereby. Many who practice medicine, and fail to give relief, would do well to consider this science.

THE ABSOLUTE RELIABILITY OF THIS SCIENCE.

The reason this science may be relied upon is that it proves itself by its results. The means instituted to accomplish the purposes intended are in accord with the demand. The necessities in each case are met with a certainty never before attempted by anything in the healing art, unless it be Surgery, and that is often unsatisfactory in more ways than one—sometimes ends in death, and sometimes fails in purpose, and does harm by change or a loss of tissue. This science cannot possibly do harm, properly applied, in any instance.

Medicines are uncertain and dangerous in many instances, and doubtful in all conditions. The trials and changes in kinds and sizes of doses are evidence of a lack of confidence as well as of reliability in their effects, and there is no relationship between causes of disease and the remedies taken as medicines, to the cure of the affection, hence unphilosophic and irrational

to say the least ; and their known uncertainty and harmfulness, in so many cases where used, is *prima facie* evidence that they are not the thing to use, and being a foreign substance renders them incompatible in all cases and conditions.

It is not so with this science, for, when the nerve waste is stopped and the pressure is removed from the vessels involved, we know that the thing is done that ought to have been done. Inasmuch as there can be no disease when the nervous system is unimpinged and the elements of the nervous system are in their proper proportion, it is evidence incontrovertible that when the system is diseased in any way, and its functions are disturbed, all we are required to do to adjust everything to rights is to take off the strain or pressure which caused the difficulty, and harmony is established and nature performs her normal function.

There is no uncertainty in this method, and disease need not be looked upon with dread when the causes are known and the means of removing the causes are at hand to restore the harmony. The knowledge of how to do the work qualifies the individual to do the work and to relieve the strain and pressure, and that being all that is proper to do, there can be no doubt about results ; for when these conditions are righted, health invariably comes to the individual, provided always that the "limit angle" has not passed where restoration is impossible ; for it will be understood that everything earthly has its limit angle. There is a limit to the power of endurance even in things without life, and all things with life are perpetuated by certain assimilable accretions or substances which contain the elements of renewal, or the force or power exhausts, and that exhaustion is in direct ratio to the deficit of supplies.

THE TENACITY OF ADVOCATES OF THEIR THEORIES.

It would be unnatural to expect that anyone who has a thought of his own, would concede that his theory is inferior to anyone else's theory ; hence, systems should not be discarded because some one else is either favorable to or absolutely averse thereto.

Merit is the only rightful standard, and when any system will not bear investigation, and stand the criticism and the severest test, it should be set down according to real merit. Simply to ignore another's thoughts along certain lines, is unfair, when one considers that all human standards are simply human, and have no right to become a standard unless absolute proof of superiority inheres in the trial to which they are subjected.

To say that Christian Science, as it is called, although there be no such a thing, in fact (yet some assume there is), Mental Science, Magnetism, Suggestion, Dieting, Hygiene, the Hydro-pathic, Osteopathic, Faith Cure, or any other means, is wrong, and to be condemned, because we are not enamored therewith, is not manly.

That each science has some good in it should not be questioned; for evidence proves that fact. As long as there is no higher opinion than man to govern mankind, or any part of them, one's opinion is as good as another's of equal intelligence, along the same line. None but God can make a standard worthy of adoption and as a rule of life to all. Ignoring Divine law has brought on humanity all his woes, calamities and death. Consider!

SCIENCE IS KNOWLEDGE REDUCED TO ORDER.

Science means to know, hence what is not known is not science. No theory can lay any claim to science, for theories are simply suppositions—the vagaries of the imagination, unsupported by actual demonstration.

The whole catalogue of theories of the various so-called medical sciences, are certainly unreliable, and are not founded on actual facts, nor is any theory or so-called system of medicine to be depended upon in any case of disease. The idea of a *foreign substance*, taken into the system, being a cure for any special condition, is preposterous, *per se!* The only possible benefit derivable therefrom is when it stimulates the nerve centers, increasing the flow of the fluids of the body; thereby hastening such chemical changes in the blood as are needed through the oxygenation it receives as it flows through the lungs. Medicines,

under the ban of curatives, have produced more misery and premature death than Famine, Pestilence and Sword combined; and yet the legislatures have catered to a set of men called doctors, and made laws which foist upon every community, in almost every state, regulations so arbitrary, so diabolically proscriptive, that men of intelligence dare not even suggest a remedy, be it never so harmless, for an afflicted mortal, without a permit from some medical *Examining Board of Doctors*, regarded as mandatory regulators of a *pseudo* science!

Instead of allowing the people the right of choice as to whom they desire to employ, they are compelled to accept the services of one licensed by the aforesaid board, regardless of qualification or ability of one they might desire to attend them.

So-called sciences, founded upon opinions and thrust upon the masses by law, has the semblance of assumption unwarrantable—an usurpation of the rights of others.

If all the “pathies” on earth were combined into one system they would not constitute a science which any rational hypothesis could intelligently accept or endorse as being worthy of confidence.

Whilst some good inheres in most all of them, yet there is a lack of science which condemns them as inefficient. Then why assume the prerogative of asserting, through law, the supreme right to practice, and proscribe all others except those dubbed with the name designated in the law?

These state medical boards even deny a man the right of reciprocity, but compel submission, mandatory at that, to their rules, or he cannot practice; not even in the state where he passed the curriculum of examination before the best qualified men of the best colleges in the state. He must pass the Examining Board or play mum, and keep himself aloof from using his constitutional rights—and even the courts pander to these unconstitutional enactments—under the plea that each state has the right to make its own laws to govern its own people. This is awfully strange logic.

We enter our solemn protest against such usurpations, and hope the time will come when men will have the right to practice

whatever they may choose, in any way to ameliorate the condition of the afflicted; making every man responsible for his acts, but give every one the right to choose his own doctor. We recommend the registration of every individual who practices any method of treatment in the county in which he or she may practice, so as to give the community ample opportunity to know who are practicing, that they may have opportunity to investigate the qualifications of those whom they may want to attend them when needed. Proficiency will then be the watchword, and inefficient ones will be read out, and they will soon retire from the field, and only those qualified will be employed, because of their proficiency to be of service to the afflicted. Qualifications will be the standard and not legal enactments. What would any community think of a law to restrict the divine services on Lord's Days to those who taught a special creed, and compelled all people to accept their dogmas, irrespective of Bible, reason, or even common sense—a set of mountebanks, sanctioned by law?

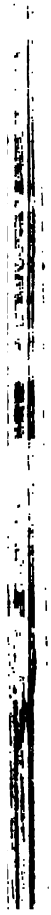
The more the people become enlightened in regard to divine and human and natural laws, the more freedom they will have, and the better for all concerned.

DIRECTIONS ON HOW TO PREPARE FOR TREATMENT AND TO TREAT.

The spinal treatment is easily made if the following conditions and directions are observed: Do not attempt to treat the spine without some protection in the way of pillows or comforts or cushions placed under the upper part of the chest and under the upper part of the thighs—so as to raise the abdomen up from the table—giving room for the abdomen to spring down without touching the table during the sudden movement recommended in the treatment of the spine. It is necessary that there be some solidity of the chest as well as the lower part of the pelvis—and by placing the pillows as directed above, the adjustment may be made quite strongly without any pain. Pillows may be all along under the chest and abdomen for that matter—so as not to knock the ribs against the hard table. See to it that you improvise these pads or pillows if you treat patients



This cut shows the manner of placing the hands when giving Chiropractic Adjustment.
It also shows the Treating-room of the Author of *Neuro-Ophthalmology*, in the WILSON
BUILDING, SUITE 426, DALLAS TEXAS, with the Ophthalmoscope, and Victor Vibrator.



at their homes. The pads may be placed on the floor and the treatment made as easily as in one's own office. A soft spring bed is not good to treat the patient on and should not be used.

Small children may be treated while lying across the knees of another person—but always remember that the force used must be in the ratio of the effect to be accomplished—and according to the strength and necessity of the individual receiving the treatment.

The patient being in position and ready for treatment, the operator should remember to place his hand or hands in such a position on the body, near the spinal processes and at about the lower edge of the bones called scapulae, holding them against the body, one hand on either side of the spinal processes, with the balls of the thumbs near together, and in this position he presses gently, but suddenly, against the body without any other motion, holding his hands in this position; *now stiffening both arms at elbows, and holding them rigid, with a sudden movement downward against the spine of the patient, on sides of the spine, he makes a sudden advance with both hands, limiting his force to a short, quick movement, and the treatment in that place is accomplished.* There will be, ordinarily, a "clicking" sound heard, but not always. If this is not heard at the first movement, it is better to repeat the movement with a little stronger force.

This may be done, as stated above, with both hands or with one hand directly over the spinous processes at the fourth or fifth dorsal vertebra, as this is the area from whence the splanchnic nervous system emerges from the spine, and is that part of the nervous system which controls, by its contact with the pneumogastric system in the stomach, the two forces; and whether there be an excessive amount of acid or alkaline secretion anywhere in the body, this movement, by uniting the footlets of the two nervous systems involved, which manufacture the secretions called acid and alkaline, neutralizes the effects of both and establishes the current, and harmony at once is the result. After the application of the treatment at the fourth dorsal, which should almost invariably be the first of all treat-

ments under all circumstances, making no difference what the trouble is anywhere else, this movement resulting, as it does, in neutralizing the effects of either one of the secretions involved, our next procedure should be to apply our treatment along the spine where the nerves are involved which affect and control the conditions we find in that part of the body from whence the nerves emanate from the spine (control, or should control, in a normal condition), and to remove that pressure from that particular part or locality where the nerves are involved. To make it specific, and with a certainty of understanding, we insist upon the student or manipulator that he first find out the difficulty complained of by the patient, and treat the spine at the place where the nerves emanate which end in the parts affected.

TENDERNESS OF NERVE ENDINGS.

Generally, and in fact in the large majority of cases, we find a tenderness along the spine, over the nerves which emanate from the foramina which lead to the spot diseased. This tenderness demands our special attention, and the treatment should be applied *there, with sufficient force to, if possible, secure the clicking sound*, as this clicking sound is the result of the separating of the facets of the bones which are drawn together by the contraction of the muscular fibers irritated by the nerves ending in said muscular fiber, and as soon as the separating of the facets takes place, the sound is produced, and relaxation of the muscular fiber results, which takes off the pressure from the nerves involved. It should not always be expected to find a tenderness at the spot diseased, but, as a rule, it is found there.

The student or manipulator should understand that the tenderness along the spine is almost always a sure sign of some difficulty at the ends of the leashes of nerves emanating from that particular foramen at the place where the tenderness is; but sometimes there will not be found this tenderness, and this lack of tenderness is in cases where the deep fibers of the leash are not involved at all which end in the part affected, but the physician or manipulator should understand when an organ is

affected where the nerves emanate from the spine which control that particular part of the body, and to be certain to manipulate the spine whether there be soreness at that place or not. In the application of this treatment we should be very *careful not to over-do nor under-do the work*. When we shall have accomplished the purpose at a particular time, needed at a particular place in the spine, we should not, at that treatment, repeat the manipulation. Let the patient alone until the next day, or at some subsequent time, when occasion may demand a repetition of the treatment.

HOW OFTEN TO GIVE TREATMENTS.

In cases of chronic disease, so-called, it will be often enough to treat the patient every day, or better, in some cases, every other day, and in rare cases at longer intervals. In all cases of acute disease, of whatever name or nature, the adjustment of the two forces at the fourth dorsal, and a treatment at the place along the spine, either in the cervical area, the brachial, the dorsal or the lumbar, should be looked after according to the nature of the disease and the place from whence the nerves emanate which are involved, in the conditions found to be involved.

If we have throat troubles, our adjustments must be made in the upper cervical area, *from the atlas to the fourth cervical vertebra*, and be it understood that the manipulator should understand the difference between an increased, a decreased and a normal circulation. Any pulsation over seventy-two (72) per minute is recognized as an unnatural increase of circulation. Anything below that is regarded as an unnatural decrease of the circulation of the blood, and denotes in the former an excited condition of the system, and in the latter a depression.

If we have inflammation anywhere in the abdominal cavity, or chest cavity, we must treat the spine in the area from whence the nerves emanate which end in the part affected, whether that be pneumonia, pleurisy, heart trouble, liver, stomach, spleen, pancreas, kidneys or intestinal canal, at any part of it. This rule carried out prevents us from falling into *the idea of treating*

disease, rather than conditions. The conditions being changed, through the nervous system, effects invariably cease. Our success in the application of this science depends entirely upon our knowledge of the nervous system, and the how to apply our treatment, and *not* upon the knowledge of the names of disease, nor outside supposed causes; for all the causes, of all the diseases of humanity, are found to be in pressure of the nervous system or over-use of the nerves involved. In addition to this peculiar spinal treatment, it should be remembered that due regard should be paid to the conditions indicated, in every patient treated.

If, for instance, after our treatment has been instituted, we find that some conditions remain unchanged, it would be due to a lack of elements in the body, or to the habits of the patient; these should be looked after intelligently, it being the duty of the physician to remove all causes producing the disease complained of. The individual should remember that all the organs of the body are refreshed and renewed by the kind of food eaten, sufficient air received into the lungs, and to a due regard to nature's calls in the habits of the body, and to keeping the surface or skin free from all impediments, such as the closure from filth or deficiency of the natural elements that supply the skin with sufficient moisture to perform its function as an element; hence, the surface of the body should be bathed as often as necessary to keep it clean and to open the pores of the skin, and keep them open, in all cases of fever or roughness of skin. The most natural element to produce a normal effect is the *sulphate of magnesia*, a solution of which, in the proportion of *one ounce* to a *pint* or even a *quart* of water, applied to the surface by the use of a sponge, going over the body once or twice at a sitting, and this daily for a few days, will be sufficient to prepare the skin to perform its function.

In all conditions of rough skin and an anemic condition of the body this should be carefully attended to, and used, as this is one of the principal natural elements needed at all times in the body, and is rendered deficient by the habits of eating white bread, potatoes and starchy food.

THE KNACK OF ADJUSTMENT.

If the physician, or the one who applies this science, will be particular as to *how* the treatment is done, and that it does not take a *hard* and *heavy* application to get results, and that different patients require different force applied, the results will be generally satisfactory. Be it remembered that when the individual is at perfect ease, muscles all relaxed and in a state of non-resistance, the treatment will be less painful and decidedly more easily done, and more certainly effectual in results.

The strong, as well as the weak, can apply this treatment without fear of failure, for, after the adjustment is made at the fourth dorsal, which unites the *two forces*, the other adjustments along the spine will be readily made, for they are to be applied in the same manner, and wherever there is tenderness along the spine, or the spinous processes seem to be drawn to either side, or even where curvature exists. The application is all to be done on the same general principles; *only* that where special parts or organs in the body are affected, the treatment should be made where the nerves, which supply the parts affected, emerge from the spine, in order to secure the results desired.

It should always be remembered that when the *two forces* are united the general effect over the entire body—that of neutralizing the excess of the one or the other, or both of the secretions, acid or alkaline—is accomplished; and if no more than this is accomplished, it will be found to be of immense value to the patient in any and all conditions. Sometimes, and very frequently, this will be all that is, or may be, necessary to do.

SPECIAL AND GENERAL CONDITIONS.

We have specific conditions that will come up in our practice that we ought to know. The question will be asked, Where shall I treat a patient for a particular disease, etc.? So that when you start out to treat a disease, remember we have certain *conditions* to overcome, and these conditions are the result of

the two forces being separated—either the excess of one or the deficiency of the other. That set of nerves generating the acid secretion has been over-stimulated, and hence excess of acid, or else the other has been over-stimulated, and hence the excess of alkali, and in proportion to the excess we have our result; or else we have an excessive amount of secretion in the system where we have our work to do. These two secretions have to do with the diseased conditions of the body everywhere, and hence the importance of understanding these first principles, so as to meet the emergencies or contingencies of all diseases that flesh is heir to. Starting at the base of the brain, at the atlas, we regulate all the nervous system involved by our particular treatment in the adjustment of the atlas. This is done while the patient is lying down, on the side of the head, face or front side of the body turned toward the bench. Now, then, with the head turned from you, you place the hand with the fist closed and the little finger knuckle under the mastoid process, and with a sudden movement downward, right arm stiffened, we usually get the click in the neck. This must be with sufficient force to give the cervical region a spring. This separates the facets of the two bones—that is, the articulating surfaces—and lets the air in and gives the sound.

Every known disease in the body is a result of nerve irritation, and this nerve irritation produces a contraction of muscular fiber and presses upon the vessels passing through the muscle, and interferes with the nervous and circulatory systems.

All diseases of the face, head and neck, and many conditions of the abdominal cavity and chest, are affected by the cervical treatment mentioned at the atlas, and lower down, especially in the third cervical vertebra on the side of the neck. Our adjustment affects the pneumogastric nervous system, the phrenic nervous system, the circulation of blood, and *regulates* the heart's action, and thereby *reduces all fever in every part of the body; it is essential that we know that the cervical area of nerves are freed from impingement, and that the muscular system in that particular area be in a normal, relaxed condition.*

Upper Cervical.—The upper portion of the cervical region we denominate the *vaso-motor area*; hence our adjustments in that region regulate the *circulation of the blood*, not only the arterial, *but* the circulation of *all the fluids in the body as well*. The nerve filaments from this particular area, ending in and around the heart, when normal, unimpinged, and not irritated, a normal action of the circulation is the result.

Brachial.—The area below this we call the lower cervical plexus, and it embraces the brachial, or that plexus of the nervous system which supplies the anterior and posterior chest and arms, hands and fingers; and adjustment in this particular locality affects all the parts mentioned above, wherever the nerves of the brachial plexus end.

Upper Dorsal.—Still further down, from the first to the fourth dorsal, we have influences, through the nervous system in that area, over the pyloric end of the stomach and lungs; and from the fourth to the twelfth dorsal influences are carried to the pneumogastric nervous system in the abdominal viscera, and neutralizing excess of acid or alkaline secretion by the union of the footlets of the two systems of nerves in that area.

Fourth Dorsal.—At the fourth dorsal we have the beginning of the splanchnic nervous system, and adjustment at this particular part of the spine unites the *two forces* which control the amount and kind of secretion which produces pain in that part of the body as well as breaking down of tissue in that or any part; and the adjustment at this particular place being properly made, by a sudden movement against the sides of the spinous processes or directly over the processes, the union of the two forces is made, and *neutralizes the excess of secretion of either, or both kinds*; and adjustments *there should always be made first of all adjustments, in the treatment of all patients for all conditions*.

For Chills—Ague and Malaria.—The chills may be arrested by the treatment at the seventh and eighth dorsal vertebra. Treat the spine while patient is reclining on face, or by drawing the left arm upward very strongly, and press the fingers against the spine at that place in the side of the ribs at the junction of

the back bone, and then pushing the arm forcibly against the taut fingers. The treatment at the eighth dorsal relieves the torpid liver difficulties.

Gastric Area.—At the seventh and eighth dorsal area we have emanating from the foramina, on either side of the spinous processes, nerves which control the *gastric secretion* of the stomach, as well as the secretion manufactured in the liver and pancreas, and these control these special organs, and if in excess, we have an alkaline secretion which breaks down tissue, and if a deficiency of action of these nerves emanating from this or these particular localities ensues, we always have a breaking down of the tissue or organ wherever these nerves end, and the treatment in that particular locality by the union of the pneumogastric nerve filaments neutralizes the excess of alkalinity and restores the parts to a normal condition.

Kidneys.—Still lower down at the twelfth dorsal we have what we call the renal splanchnic; that renal splanchnic ends in the kidneys and controls their action, and hence a disturbance by pressure upon these filaments interferes with the normal function of the kidneys. This is the area to treat the spine for all kidney diseases.

Bowels.—Still lower down we have, at the first lumbar, a set of nerves that control the peristalsis of the intestinal canal, including the colon, and thereby are instrumental in producing that condition called constipation, and adjustment at that particular part of the body relieves the difficulty.

Genital Organs.—At the second lumbar we have emanating from the spine the genito-crural nerves, whose function seems to be well established—the control of the genital organs of both sexes—and all the functions of said organs are performed by the influence of this set of filaments emanating from that particular area. The crural nerve, ending in the lower portion of the abdominal viscera and supplying that particular area, together with the upper part of the thighs, we find that adjustment at this second lumbar corrects all difficulties and diseases in the area where this set of nerves end, and any irregularities of the female, any unnatural condition of the organs in this region, are con-

trolled and regulated by adjustment at that particular locality, whether they be tumors of the ovaries, prolapsus of the uterus, anteversion or retroversion, leucorrhœa, dysmenorrhœa, or any abnormal conditions known to both sexes, caused by nerve impingement.

Still lower down in the lumbar area, including all the dorsal nerves in the lumbar region, by our treatment called adjustment, we regulate the action of all the region or regions where these nerves end, hence rupture of any kind is amenable to the treatment in the middle and lower area of the lumbar nerve-area.

Sciatica.—In the treatment for sciatica, we begin our treatment at the twelfth dorsal, and continue down the lumbar area as far as the fifth lumbar, and then manipulate by vibration, either with the fingers (or vibrator) or hands on both sides of the spines of the sacrum, over nerve foramen and leashes, freeing from pressure the contraction of muscular fiber over and around the leash called the sciatic nervous system. All pains, aches and diseases of the lower limbs are amenable to the treatment in the lumbar region, hence ulceration, varicose veins, pains of any kind in the lower extremities are successfully relieved by adjustment in the lumbar area. It makes no difference what the name or nature of the disease is, whether acute or chronic, whenever the nervous system ending in the parts affected is freed from pressure, a normal action is at once established.

If we have pneumonia, we must remember that the nerves ending in the bronchial tubes and air cells of the lungs must be freed before health is restored, hence we begin our treatment over the area from whence these nerves emanate from the spine which end in these particular localities where disease is found.

If we have heart trouble, we go first to the upper cervical area. If we have trouble in the arms, of any kind, we go to the brachial plexus for treatment. If we have difficulty or disease in the digestive organs, we go to the spine in the area of the eighth dorsal. If we have kidney trouble, we go to the twelfth dorsal. Constipation at the first lumbar. Genito-urinal troubles and female troubles, we go to the second lumbar; always remembering, first, to unite the forces at the fourth dorsal.

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there are no special manipulations anywhere in the body which have for their sole object any specific effect at particular places as such, for no disease will succumb to any treatment made simply by relieving any one set of filaments as such, but relief is dependent, not only upon relief of pressure of said filaments, but because the forces are united and filaments freed which end where disease exists.

In case of typhoid or puerperal fever, we have to adjust the area which first unites the forces, and then relieve the nerves which end in the parts affected. In puerperal, or child-bed fever, we universally afford relief by adjustment at the second and third lumbar.

For bronchitis, we relieve it at the third cervical, the first dorsal and fourth dorsal area.

Pneumonia we find yields quickest by adjustment at the third, fourth, fifth and sixth dorsal, and should be made in bad cases from four to six hours apart until absolute relief is obtained. It will be remembered that unnecessarily harsh treatment should be avoided under all circumstances. Simply sufficient force to unite the forces is all that is necessary. All conditions of irritability, excessive nervousness, may be avoided by first regulating the circulation of the blood in the vaso-motor area and at the fourth and eighth dorsal, for the reason that the first regulates the circulation of the fluids and lessens irritation, and the second unites the forces and equalizes the secretion, resulting in a normal or natural condition.

The manipulator will understand he must study and know the nervous system involved in all conditions called disease, and that the freedom of these nerves along the line from their emergence from the spinal cord to their endings must receive special attention, and this course guarantees scientific success.

When we take hold of a patient, or treat him or her, the impression should be emphatic that relief can only be obtained by co-operation of their will with the will of the operator, in the application of this science, for be it understood once and forever that mind controls every tissue in the body through the nerve filaments emanating from the brain, at their endings, and

that when the nerve filaments are in a normal condition, unimpinged, and have not been used in excess, they convey the direction for the control of the parts, in which they end, absolutely.

For manipulation in the neck for disease emanating from the cervical area, have the patient lying on stomach and the face turned from the operator; place the heel of the hand, or outer edge, directly against the side of the neck, pressing at the third or middle of the upper portion of the cervical area. Place the other hand as in the other adjustments, on the top of that hand, and stiffen the arm at the elbow on the hand placed on the top of the other next to the neck; make the sudden movement, and generally there will be a response of a clicking at that particular locality. This may be done on either side of the neck at different times, but only once at a sitting.

If there be trouble at the base of the brain and tightness of muscles originating from the mastoid processes, or posterior (upper part), sides of the neck, the treatment is made as follows: Place the outer knuckle of the wrist against the side of the neck, posterior portion of the mastoid processes, closing the fist tightly, and placing the other hand over the top of that wrist, and with that arm rigid, make the sudden pressure with the force directed *over* the part *to be adjusted*. This is called the "atlas adjustment," and is beneficial for all conditions of impingement of the nerves in the upper portion of the cervical area, and in parts wherever these nerves end. All adjustments of the spine should be made when the body is perfectly relaxed as nearly as possible; and with the sudden pressure over a single part at each sitting, *once only*, except in cases where a response is not obtained by the one adjustment, it is allowable to use stronger adjustment to ascertain whether response can be had at that time.

These adjustments may be made anywhere along the spine for any and all conditions found, due to the pressure of nerves emanating from any locality, along the spinal column.

HOW TO TREAT SPINAL CURVATURE SUCCESSFULLY.

Always unite the two forces as directed elsewhere, at the fourth dorsal vertebra; this being advised in all spinal, or any other condition called disease.

In adjusting the spines which are out of line, a condition called spinal curvature, do the treatment either above or below the curve; gradually approaching from either side of the main curve—that is, the most prominent part of the curve, but not right on the main prominence. The treatments should be moderate, not too strong, at each adjustment, and these should be repeated daily or at longer intervals, as desired by patient or what suits his convenience.

The thumb placed alongside of the spinous processes, and the force applied with the other arm—hand against the thumb, will be a good way to reduce the prominent projection of the processes.

The treatment may be gradually toward—and even right on the curve—after several treatments have been given at the sides, above or below, or both ends of the curve. The nervous system ending in the muscles which are attached to the sides of the bones cause the curve, and as soon as these nerves are free to act naturally in the muscular tissue, the curvature will be cured.

OF SPECIAL CONSIDERATION TO THE READER OF THIS BOOK.

The question will be asked, if Neuropathy does what is claimed for it, why recommend Osteopathy and Ophthalmology?

We wish it to be distinctly understood that the term neuropathy embraces and includes all means which aid in relieving the nervous system—whether it be through the means used by Osteopathy or Ophthalmology.

The means recommended herein are the best known, and all combined make up a system of treatment which does the work in many conditions found to exist, and which are denominated disease, that either of the named methods of treatment may be inadequate of itself to remove.

In such cases the essentiality of knowing how to use the others, either or all combined, to accomplish the purpose. Many

times, simply osteopathic treatment answers the purpose—and the others are not needed; and other cases may require no other treatment but what is recommended in Neuropathy, while some cases will need the treatment recommended in the Ophthalmic department.

Having familiarized one's self with the nature of the conditions complained of, the disease existing in a given case, a knowledge of what course to pursue, and which department is applicable to use in the case to be treated, will be appreciated and properly applied. There are but few cases which will need all of the means recommended in the several departments at the same time.

We have thus specified in order to leave the mind free to select, from either or all of the several departments, what is applicable to given conditions in the various and sundry complaints called upon to treat; for in this book will be found means to meet the indications in every condition of a functional character known to the human family.

All that is necessary, to get favorable results, is to apply the science as directed, and results will be as stated, in almost every case—if not all cases; not so far advanced as to make a change an impossibility; that is, those not having gone beyond the limit of human possibility.

In the Neuropathic department, the spinal adjustment is the main treatment, and in the Osteopathic department much is dependent upon physical manipulations, as shown in the various cuts; so that the operator will find ample instructions in that department to exercise all the muscles in the body, and for the various conditions named in explanation of the cuts.

In Ophthalmology, the principal thing to be done is to take off the strain from the *nerves, ending in and around the eyes, and how to prescribe the proper correction to arrest nerve-strain and the nerve-waste* and cure all diseases dependent upon such strain and nerve-waste. These are as essential as anything else to be done. As these embrace the entire nervous system, we recommend them. They will be found absolutely sufficient and

satisfactory to all. These will be sufficient, and may be confidently relied upon.

Each and every department has been amply proven and demonstrated, and has stood the test of the severest criticism and trials.

Every condition denominated by chiropractors, as "luxation," being an impossibility in the very nature of things, the question arises when the so-called adjustment is made: What produces the clicking sound in the spine? The most reasonable answer is in the contractility of the muscular fiber along the spine. In the ratio of all other portions of the body there are more muscles to contract; more contractions on account of more attachments to bones; more necessity for ligamentous guy-ropes; because of more strength being needed along the spine than anywhere else in the body. Provision seems to have been necessary to protect the spinal cord from injury; then there should be on all sides of the cord sufficient guard from all ordinary encroachment, and inasmuch as all the body, normally, is governed by *mind*, through the nerve filaments, and every part of the body being controlled thusly, we see the necessity of a substantial provision being made for the protection of the nervous structure as it emanates from the cord to be distributed to the various parts of the body. Instead of the "clicking" being the result of adjustment of a "supposed luxation," it is nothing more nor less than a *slight separation of the facets of the bones or ribs under the places where adjustments are made.*

DEVIATION OF PROCESSES.

The question is asked, Why the deviation in the processes of the spine at the places from whence the nerves emanate from the cord through the foramen ending in the part diseased? It has been *shown* in our previous remarks, *that the muscle fiber has but one function*, and that is to *contract*. From this fact the facets are strongly drawn together by the contraction of the muscle fiber, and if the muscle fiber that contracts is attached to the ends or sides of the spinous processes, the tendency is to

incline the bone in the direction of the contracted muscle, and the *sudden movement* in that *particular* locality relieves the *contraction of the muscle*. The *sudden separation* of the *facets takes place*, and the "*clicking*" *sound is produced*. The sudden movement overcomes the muscular contractions and *unites the forces* at the end-nerve-filaments, and equalizes the fluids by increasing the circulation of the blood, changing the chemical constituents of it, and producing an entire change in the condition caused by the contraction of the muscular fiber. The nerves emanating from the spine pass out through the foramina, and passing through the various thicknesses of the muscular structure are drawn down upon; this produces an interference in the function of the nerves where they end in proportion to the degree of pressure, causing a neutrality of action or a destruction of nerve influences. We have shown heretofore that there are *two forces* in the physical organism, one denominated the *positive*, and the other the *negative*; and that it is the province of the spinal nervous system, as we have seen (from the fourth to the twelfth dorsal), to *generate alkaline secretion*, and that it is the province of the *pneumogastric* nervous system to *generate acid secretion*. *By our sudden movement*, against the spine, *at the fourth dorsal*, we *unite the footlets of the two nervous systems*, which neutralize excess, of either one of these two elements, and immediately harmony is instituted.

WHERE TO UNITE THE FORCES.

At the fourth dorsal, where the greater splanchnic nerve emerges, we begin our *treatment*, or *adjustment*, in order to *unite the forces*, and *neutralize excesses anywhere and everywhere in the body*.

At the lesser splanchnic, between the *sixth* and *seventh*, we *adjust the spine* for relieving all trouble at the ends of the nerves from these special foramina; and as these nerves control the action of the *stomach* and *generate the secretion in the stomach*, together with the *pneumogastric nervous system*—one generating the *acid* and the other the *alkali*—if we have pain in the stomach, our sudden movement arrests the pain or patho-

logical conditions, found in the stomach itself, by *neutralizing the excess of acid*.

Further down, at the eighth, we also have a leash of filaments from the spinal foramen, which end in that region of the abdomen, and control the action of the *liver, pancreas* and *spleen*. We adjust there to relieve these organs of excesses, either of a positive or a negative character.

At the twelfth dorsal, where the nerves emanate from the spine, which control the action of the kidneys, and the secretion of those organs, we relieve the pressure from that set of nerves, by our treatment, and change the *abnormal condition* of the *kidneys to one of health*.

We find also that all *skin diseases* are relieved by treatment of the spine from the fourth to twelfth dorsal vertebra.

Our treatment at the *first lumbar* relieves torpid conditions of the intestinal canal, and especially the lower portion of the colon, and the outlets of the body.

At the second lumbar we relieve the nerves which control the genital organs, anterior portion of the thighs, and lower portion of the abdomen, in the front. All difficulties in the abdominal structure, including rupture, or weakness of any of the fibers of the muscular system of the abdominal viscera, are relieved by *adjustment* opposite the difficulty, along the spine.

LUXATION.

Every bone in the spinal column, called a vertebra, has a body, a spinous process, two laminae, and two facets, or articulations, on the posterior aspect of the body of the bone, articulating with the main body of the spinous process, and between these processes and the body of the bone, emerge *leashes*, or bundles, of spinal nerves. The bones are held together by ligamentous structure to which muscles are attached, and articulate on smooth surfaces where the facets join one another. Between the bodies of the bones, is a septum of a spongy nature, serving as a cushion, to prevent concussion from sudden contact with the feet on hard substances.

The nervous system of the spine consists of what is termed the cerebro-spinal nervous system, as well as the sympathetic nervous system. This nervous system of the spine emerges in leashes along the sides of the spine, underneath the lamina, in thirty-one places, from the atlas to the coccyx. The bones are held together by ligamentous structure joining on from process to process, from lamina to lamina, together with the periosteum, on the posterior aspect, and laterally, with a fibrous cartilagenous substance on the inside of the bodies of all the vertebrae; and the muscle-tissue attaches to this cartilagenous, ligamentous structure, posteriorly, in five layers. These five layers of muscles are the levers of the spine. The contracting of this muscular structure is caused by irritation of the nervous system ending in the muscular structure; because, the only property of the muscular tissue is to contract, and never does contract, unless as a result of irritation. All movements of all the body, in all parts, are the result of nerve influence.

Regarding ankylosis of bone—it never takes place except as a result of inflammation. False ankylosis results from permanent contraction of muscular fiber, and is not accompanied by inflammation. All inflammatory processes are the result of nervous irritation; always taking place at the ends of the nerves involved. The nervous system, as it emerges from the spine through the lamina on either side in leashes, distributes itself where functions are expressed. In other words, all action of the nervous system is at the ends of the filaments. Ankylosis can not possibly take place then, in the strictest meaning of the term, without inflammation first. False ankylosis takes place only as a result of nerve irritation in the muscular structure.

Inasmuch as the nervous system controls the body everywhere, whenever the nerve filaments are undisturbed, and without any pressure from their origin to their terminus, we have a normal condition. All disease being the result of nerve irritation, it is important to free the nervous system from pressure or irritation everywhere along the line, in every part of the body. Now, as muscular contraction takes place from nerve irritation, due to pressure upon the nerves which end in the part, it follows, in

order to remove the effect, we must remove the pressure from the nervous system involved. Nerves emerging from the spine and passing through *muscular fiber* may pass *through uninterrupted*, and perform their normal function where they end. If from any cause contraction of the *muscular* fiber through which the nervous system passes, around the nerve filaments, it influences the nerves at their ends, in proportion to the pressure along the line of the nerve.

Now, inasmuch as all nerves manifest their functions at their ends, all disease, so-called, is the product of nerve influence everywhere in the body, and to that *extent the nerves are influenced.*

THE REASONS FOR UNITING THE FORCES.

If, for instance, we have a set of nerves emerging from the fourth dorsal vertebra, ending in the posterior portion of the stomach, impinged, or pressed upon by the contraction of muscular fiber, which is always due to irritation of nerves ending in muscular fiber, we have an increase or decrease of *secretion* according to the *function of the nerves* or the *glands* in which the nerves end (the function of these *leashes* of nerves being especially to *generate negative power*); and the function of the nervous system, called the *pneumogastric* set of nerves, being to *generate acid secretion, the union of the footlets of the two sets of nerves*—the one emerging from the spine in the locality mentioned, and the other set filling all of the chest and abdominal cavity—must be effected, and are united at their footlets, when a normal condition exists in the body. *Every nerve in the body, remember, performs its function where it ends*, and as all nerves end in footlets everywhere in the body, and *mind being communicated through the nervous system, thought is transmitted through them, and, through the footlets, to other nerves, and function is performed there*; and there being at least *forty-two double centers*, and all of these centers in the calvarium or *brain cavity*, every part of the system being supplied by nerve filaments ending everywhere in the body, they become the *intelli-*

gence transmitters whenever a normal condition of the nervous system exists.

A deviation from the normal condition of the nervous system is produced either, by pressure, or *over-use* of the *nerves through which function is performed*; *exhausts nerve power, and interferes thereby, in the performance of the functions* in proportion to their use, or over-use.

CONFRONTED BY THEORIES OF "LUXATION OF BONE?"

It became a part of the early teaching of Osteopathy and Chiropractic sciences to assume that the "sole cause" of disease originated in "partial" or "complete luxation of bone or bones." The Osteopath taught that the "atlas," the "axis," the "hip joint" and the "ribs" were out of place, turned up, out or in, and were pressing on some blood-vessel, nerve or tissue, and it demanded special attention, or the lameness, sickness or pain would never get well.

The Chiropractic came upon the stage with a great show of spines, all disjoined or "anched," and with zeal characteristic of the thought, advocated the idea that "some spinal vertebra was out of line, and impinging upon some nerve or nerves, and nothing would relieve the afflicted mortal but to have his spine adjusted."

These special representatives of the two "bone doctors"—Osteopaths and Chiropractics—have so taught their students accordingly. We were the recipients of these ideas—poured into our thought-box, and with much fervor by the representative heads of these so-called sciences—and to openly deny their notions while a student would have incited the ire of their equilibrium to that extent that some other and more congenial habitation would have been more tranquil for the time being at least. So we sat still as a humble student, and suffered such teaching to flow uninterruptedly from the "famous discoverers" of these marvelous sciences, and wondered what would be the final outcome, and we found out; learned what these "masters of their discoveries" had to say; watched in silent awe and intense gaze when the attempt was made to "demonstrate" their theories of the supposed causes of diseases—from these sages of the cen-

turies — promulgating the new philosophy of the manner advocated by both, “adjusting the supposed luxations” — the supposed causes all the ages had failed to discover, the sole causes of human ills. It is strange that both attributed the same thing as the cause; but both had a diametrically opposite manner of remedying the difficulty, and one went all over the body, and took in bone, muscles and nerves, and the other confined himself to the spine, and “anchylosed bones” and “impinged nerves”! Both were equally zealous of his method and theory being the only right one.

That these two sciences are based upon the same philosophy can not be denied; but each of the claimants of the discoveries certainly have the one and the same philosophy, and only a different method of applying it, and as the difference of treatment produces, many times, a different effect, it can be truly said that they seem like entirely different sciences; for it is absolutely true that one might receive the teachings of the one and know nothing as to how to apply the treatment of the other, to accomplish an expression of the same philosophy — “that of freedom of the nervous system.” Neither would the one be familiar with setting any joints but the supposed luxations of the spines, while he would not pose as a “setter of other joints — ribs, hips,” *et al.* One being called an Osteopath and the other a Chiropractic, this is one of the philosophies which admit of two ways of being expressed, and neither one being sufficient in expression or application to begin to satisfy the absolute demands of the possessor of either, nor by the one who has both and is familiar with all they both claim.

Whilst there is indescribable merit in both of these sciences, and each has an important place, and without them there is an unfilled “niche” in the curriculum of treatment, we are not so circumscribed in our limitations and compass of the sciences of healing as to assume that even they include all that is necessary to know how to stop all progress, or to embrace all the causes of human ills; that each may be advantageously useful, and accomplish much good, relieve much suffering, take off the “pressure” from many nerves, arrest many pathological conditions, and bring

joy and gladness to many afflicted mortals; yet there is some of the nervous system which these systems are inadequate to affect in any way directly, and leave them for other means to be used to wholly embrace all of the nervous system of this body of ours. So that to be panoplied with a full armamentarium for all contingencies we would most earnestly advise the consideration of a means of cure, with the others mentioned, a method of "stopping waste"—"nerve waste," "nerve strain"—which is not accomplished by either Osteopathy or Chiropractic. This means is found in properly applied Neuro-Ophthalmology.

In order to be a healer, in the strict sense of the term, the mind should be stored with a thorough knowledge of the human structure—its anatomy, pathology, and phrenology, psychology, and temperaments of the human family. To depend upon the merits exclusively of either of the so-called sciences of healing, and become an advocate of only one idea, of one way only, to set to rights this complicated cosmos, when wrong, savors too much of doing all the housework with a broom. It might be cleared of dust, but mankind has use for his dust for a while. The proper arrangement of his molecules is the very thing needed for health. Study him as a cosmos, and learn how to adjust him under all the varied circumstances under which he is, or is likely to be placed, and then you will be prepared to meet the demands all round.

The Osteopaths have grown to be an immense throng, and have thrust their philosophy into almost every civilized country on the globe, and with untiring zeal they urge its claims. The Chiropractic science came later, and with greater pretensions of superiority, but slower growth. It certainly has deserved merit in it; but, like Osteopathy, it needs to be revised, and the false theories eliminated therefrom, and the true status fully explained, and freed from the narrow conceptions of its founder that "luxations are found and adjusted" and thereby all diseases are dispelled. The tendency of all unlearned founders of a science is to carry the thought of their theories too far into the mysterious, and having but a limited knowledge of things in general, are liable to exaggerate facts and indulge in overdrawn hypotheses

which investigation and careful scrutiny will not sanction. We have had no little experience along the lines of these philosophies, and whilst the principles are in the main correct, yet neither the founders of Osteopathic nor Chiropractic science comprehend the true status of their theories, and have not explained why their manipulations result in such physical changes when applied in their peculiar manner. The clicking resulting from adjustment can never be shown to be "that bone has been thrown in place," as they so strenuously maintain.

THE KEY TO THIS PHILOSOPHY OF HEALING.

In another part of this work we have tried to show that there are two forces which govern the physical body when in a normal condition and all its functions are properly performed. Whether the reader believes this or not, it is so, nevertheless! The one *Positive*, the other *Negative*; one a generator of the acids, the other the generator of the alkalies, and these being controlled by the sympathetic nervous system, one can very readily understand, when an interference of the functions of any of the filaments of this system of nerves takes place, there is manifest a disturbance at the terminus of these filaments, demonstrating that an interruption interferes with nerve function, as it is termed, and the effects are solely dependent upon the ratio of disturbance of the nerves or nerve fibers involved therein. The disturbance produces chemical changes in the nerve structure, and thereby changes the force of the dynamic power, simply because the elements of the media are changed (nerve substance). We do not understand that there is any power in the nerve — any more in comparison than there is in a wire which conveys the dynamic power which moves, through electricity, a weight millions of times heavier than the wire itself. It will be understood that nerves are only the media through which power is conveyed, mind, will, either conscious or subconscious, being the power. Hence there is no reason in assuming that there is a pent-up, inherent power to draw from in the physical organism. Nerve exhaustion simply means, according to my philosophy, decrease of chemical

elements in the nerve itself from over-use, leaving the media deficient of mental conductivity of mental force — mind, expression. It is a known fact that when the whole nervous system is exhausted, there is a weakened exhaustion of the whole nervous function thereof. Why not individually as well? Think, reason. If you use an organ too much, do you not perceive its exhaustion? What else is it but a result of used-up elements in the nerve itself? Thus the medium becomes impaired, and needs to be renewed of wasted elements to be *in statu quo*. No argument can disprove the truth of this philosophy nor overturn the reasoning here presented; and it will be true as long as time lasts.

There is no power in a dynamo, but it generates power. This power is created by friction; the power is electricity, and this is conducted through wire. This wire must be a conductor or the power would never leave the dynamo. This is the case as regards the power which moves this body — mind; and mind is rendered active by systematic demands suggested by a power outside of the body, an inexplorable necessity which conduces to the harmony of the elements and functions of the human body. When these functions are performed by normal suggestions, there is harmony, and when mental friction takes the rule, we have disease — inharmony.

This may be illustrated in the case of the business man. Let all the energies be directed to a particular pursuit, using every faculty of his mental caliber in the direction of its accomplishment, giving the nerves which go to and end in his stomach no time to perform their function, and it will not be long until the food fails of digestion, and that individual complains of indigestion. The proposition might be enlarged, and the larger per cent. of human ills shown to originate the same way.

It will be understood that there exists no power in the nerve itself any more than any other part of the body of the same size; but the power is mind — that is the dynamo which runs the machinery — the nervous system being the media, the conducting wires as it were, to transmit the power. What power there is in mind can not be measured; but whatever force is transmitted can be measured, the same as gas, electricity or steam. What we

call nerve power can be, and is measured, and the amount definitely determined, so that, knowing the parts at work, we may know the ability or capacity to perform the labor allotted to them in a given time by a given quantity of nerve filaments used in a given locality. If not, why not?

That the nerves are not the power, we may know by comparison with electrical force; for a power sufficient to move a large weight passes through a wire insignificantly small in comparison to the weight, for many tons are moved through a wire not larger than a common cambric needle, and the wire does not seem to be affected in the least; but be it understood that the wire must be a conductor; that is, must have the elements of conductivity in it.

Nature is continually demonstrating the fact that affinity is a product of certain chemical constituents, in a given quantity, in a given thing, in order that all the elements may harmonize (live in peace with each other); and this law is so exact, that when disproportion gets in the way, there is destruction of the harmony, and not infrequently of the organized substance, so that the law is universal. Why not recognize it in the human body? On any other hypothesis, how can any one explain why it is that in certain localities of the alimentary canal there are acid secretions generated, and in certain other parts there are alkaline secretions generated? We say, "generated," for they are, by direction of mind through the nerve filaments ending in them, ordering certain secretions withdrawn from the blood as it flows through the glands. It will be observed that the same kind of fluid passes in and through all the glandular system; but that in some particular glands one kind of secretion is drawn out of the blood, while in another gland an entirely different kind flows therefrom. The structure of the glands do not account for these differences in the excreta from the blood any more than the same phenomena in the capillaries taking place to supply the demands of the surrounding tissue; for in one place we have carbon and phosphates, and in another lime and sulphur, and in another soda and lime. There is no other reasonable hypothesis than that mind superintends all the processes of growth and decay

throughout the entire body, and, in fact, throughout the whole universe of matter, and all things terrestrial and celestial are absolutely controlled by mind. The rolling billows of the mad old ocean have their bounds; the icy regions of the North are stayed by an unseen power, and the tides come and go with the regularity of day and night, and an unseen power holds the earth in a balance which is a wonder incomprehensible. Then why attribute the government of this thing made "in the image of its Creator" to a chaos of incongruities and chance?

To understand these forces enables one to deal intelligently with his own and all other human bodies. To assume that the liver, the lungs, the heart, the kidneys, the diaphragm, or any other function or organ controls this body, is surely assumed ignorance.

SOMETHING ABOUT REFLEXES.

Those emerging from the level of the second sacral to the plantar. The epigastric, or abdominal, from the sixth to the eleventh dorsal. The genital from the second and fourth lumbar. The scapular from the fifth cervical to the first dorsal.

The musculo-tendinous reflexes are ones which produce the clonic spasms, and are the fifth lumbar and first sacral. We have the knee-jerk from the third and fourth lumbar.

The flexors and extensors of upper extremities are the sixth and seventh cervical. We have the spinal center, complex centers, at the sixth cervical, and second dorsal.

The sexual center at the second lumbar.

The vesical and rectal through the third, fourth and fifth sacral.

The vital center is supposed to be between the medullar and the fourth cervical.

Pain in back of head from third cervical, and also pain in ear from this plexus. Pain in sterno-clavicular region from fourth and fifth cervical. Shoulder, arm and brachial region from the sixth and seventh cervical and first dorsal.

The upper six vertebrae in dorsal region, corresponding pains are felt inside of the corresponding vertebra, and treatment should be made there to relieve. The nerves emerging from these vertebrae supply the intercostals, skin and the epigastric area, hypogastric, umbilical and abdomen down to the iliac area, for the nerves emerging from the spine down as low as the twelfth control the muscular tissue in front of them. Those emerging from the lumbar area supply ilio-hypogastric, ilio-genital, ilio-crural, and antero-crural area, and pains referred to in the internal saphenous nerve, as far as the ball of the big toe, may be attributed to

have their origin in the lumbar area, and treatment should be in that region.

It is a matter of considerable importance to remember that we have caries of the spine, and where there is caries of the spine in the region of the twelfth dorsal and first lumbar, and a constricting or drawing pain or pains around the body in that region, with tenderness there, we are liable to find a psoas abscess, and the pus will trickle down through the sheath of the psoas muscle, pointing in the groin, or femoral area, through the fascia of the muscle, or through the ischio-rectal fascia, or through the great sacro-sciatica foramen, or through the quadratus lumborum muscle into the lumbar region, or it may follow the fascia of the psoas muscle down to the ending of that muscle at the lesser trochanter. The opening to the pus may be reached through either place mentioned above — where the abscess is found to point — and should be let out.

REGARDING HOW MUCH TO TREAT PATIENTS.

It will generally be noticed when any disease is troubling any one, that soreness at the sides of the spinous processes from whence the nerves supplying the parts diseased, a tenderness or soreness there, will be felt by the person afflicted, when gentle pressure is applied there, by the operator, or any one else. When there is no soreness along the spine, there is not apt to be any trouble at the end of the nerves emerging from spinous foramen, and there will not be needed any treatment of the spine; but should there be, treatment is to be continued and repeated until all such soreness subsides. This treatment — adjustment — may be repeated every day, or every other day, until patient is entirely freed from soreness.

Diarrheic conditions may be absolutely cured by pressure and raising the lower limbs at the same time as a counter pressure, holding the limbs up while the patient lies on the stomach or front side of the body, and the operator places thumb on one side of the spine down next to the sacrum, and fingers on other side of spine, using pressure as the lower limbs are being

raised — firmly, steadily, gently, of course — and then lower the limbs to a level, and move the thumb and fingers on vertebra higher up the spine, and thus include all the lumbar area in the treatment. Always treat upward for the arrest of any and all discharges from the body in that region. The same effect may be had by letting the patient lie on the back — and lifting patient, with fingers of both hands touching spines on either side in lumbar area. Lift body strongly with fingers thus placed, slowly and up to a gentle curve, then letting patient straighten out, and repeat once or twice. This does the work — cures lumbago. Letting patient lie on the side while the fingers are placed just above the sacrum, and one limb drawn strongly backward, and go up the spine as before directed, will accomplish the same purpose. There is no better remedy than this ever tried. Usually one treatment is sufficient to arrest the difficulty.

A DESIDERATUM OF SPECIAL IMPORTANCE.

That the “two forces” claimed as a basis of the cause of disease is true, we submit the following facts: That when spinal vertebrae are out of line, when replaced by “our peculiar method,” certain results follow in the way of return to a normal condition, the opposite of the condition when the spines are distorted. That when there is soreness along the sides, or either side, of the spinous process, in the region where the leashes of spinal nerves emerge, there is usually some deviation of contour of the spinal processes, and that when the adjustment is made, that soreness ceases, and diseased conditions at the ends of these leashes of nerves cease, whether they end in the lungs, liver, spleen, kidneys, ovaries, genitalia, abdominal viscera, colon, rectum, or either upper or lower limbs; so that this amounts to positive proof of specific and immediate results of such adjustments, and may be positively relied upon in all conditions as a certain means of removing all spinal nerve pressure. The nomenclature (nosophy) need not be considered.

This course of treatment is so radically different from all others that it will seem incredulous to the reader at first glance;

but, when the application of this philosophy is made, the surprise will be greater still, for the results will be fully up to expectation of the most earnest seeker of a verification. In a word, it will be as stated, and results will universally follow as stated; for we have not presented "cunningly devised fables" to deceive. This is a system of demonstrable facts, and not theories and failures. The principles herein will go down the ages as long as time lasts, and never need changing as long as man remains anatomically as he is now, and has been for all past ages. This system has to do with the physical man as he is, applicable to every condition known or ever will be known; for it deals with him as he is, and the means may be improved as to application — a more intelligent application — but the things to be done will always be an essential desideratum and absolutely demanded; for they constitute the means by which the waste of nerve power is restored and nerve pressure removed, so that harmony may be re-established and health restored in a natural way. Too much emphasis and intensity need not be feared, for confidence may be assured; for the evidence will be forthcoming as the application is made and the principles are carried out in practice.

The study of the relationship of the nervous system to the bodily control enlightens one as a lamp lights his way in the dark; for all is guess-work without a knowledge of the human system, anatomically, physiologically and mentally. When medical colleges shall have adopted the practice of instructing students in the rudiments of anatomy as related to pathological conditions, and a knowledge of causes as they are to be found in the individual (and not outside of him, seeking some foreign substance as the cause), there will be a more thorough understanding of how to ameliorate human suffering simply, effectually. For a while it will be hard to "unfog" their "fogged" intellects so as to discern truth.

A SPECIAL DESCRIPTION OF THE DIGESTIVE PROCESS.

Starting with a morsel of food in the mouth, we begin the process of digestion; for in the mouth are the teeth, consisting of incisors and molars, or grinders; and at the sides of the neck, at the angles of the jaws, are the parotid glands, situated just under the ears; and at the angles of the jaws are two more glands, and under the tongue another gland. These are named respectively the parotid, submaxillary and sublingual glands. The jaw excite the glandular systems above named to action, and as the mastication proceeds — as the chewing is carried on — there is secreted and thrown out through small channels, called ducts, into the mouth a secretion of an *alkaline* constituency, which is mixed with the food as the process of mastication proceeds, which Nature has provided for a lubricant and dissolver of the food, and thus prepares it for the next step in the process of digestion. As the food is thus prepared, being mixed with the saliva — the name of the secretion from these several glands — it passes down into the stomach through the tube called the oesophagus, and there meets a secretion called the gastric secretion, and this is an *acid* secretion, manufactured in the stomach itself; and this secretion, through what is termed a peristalsis, a vermicular motion of the walls of the stomach, is thoroughly mixed with the food and the *alkaline* secretion from the mouth, and by the peculiar onward motion of the muscular walls of the stomach, the contents of the stomach, with its combined secretions and food, ushered on through to the third department of digestion into the duodenum, where it meets another secretion of an *alkaline* character, manufactured by the *pancreas* and the *liver*, emptied into the duodenum

through a duct called the *ductus communis choledochus*, and this secretion completes the process of digestion, and the whole mass there, in the second stomach, is called *chyme*, and by a process of motion of the intestinal canal, called peristalsis, ushered on through the lumen thereof for a distance of twenty to twenty-five feet, to the *ilio-caecal valve*, where its unabsorbed material enters the large intestine, called the colon; this is four to six feet in length and has three divisions — first, the ascending; second, the transverse, and third, the descending colon; and these angles are named flexures — hepatic, splenic and sigmoid flexures, the latter emptying into the rectum. All these processes described are the natural order of that process we denominate digestion, and are all controlled by nerves.

The glandular secretions which flow into the mouth are the product of nerve action in the several glands mentioned, drawn from the blood as it passes through the glands, the special kind of secretion necessary to the performance of the function required for that particular purpose, in that special locality, at the beginning of a process which finally culminates into blood. A similar process takes place in the stomach, but the secretions are of a different constituency — that of an *acid* nature. The acid in the stomach and the alkaline secretion from the mouth meet and neutralize each other, and mix with the food, and through the irritation of the presence of the food and the acid secretion in the stomach, the walls of the stomach contract in its various circular and longitudinal muscular fibers, and push the contents on into the *pylorus*, into the *duodenum*, where the secretions from the *pancreas* and the *liver* meet and finish the process of digestion, by the solvent properties of the *alkaline* secretions from the *liver* and *pancreas*.

It will be understood that all of these secretions above named are the product of mind, through the nerves, acting upon the blood as it passes through the structure of the various glands above named, showing that, in each division of the digestive apparatus, the mind, through the nervous system, controls the selection of elements essential to the performance of the functions

designed by an Allwise Creator, to keep in order all the parts of this wonderful creature called man.

Having thus followed this process to a terminus where the digestion is complete, and the result being what is denominated chyme, we are ready to take up the line of march to the goal where this chyme is converted into blood. On examination of the inside, the mucous membrane, of the intestinal canal, it will be observed that there are folding vessels just under the smooth surface, exposed as the peristalsis, the vermicular twisting and folding, takes place—little openings into the intestinal walls, called suckers, absorbents—and as the fluid, the chyme from the duodenum, passes along the lumen of the mucous membrane of the intestine, these vessels are exposed and the fluid passes into them, and this fluid passes through small tubes along down the walls of the intestine until it comes to a point in the abdomen about opposite the second lumbar vertebra, and is there emptied into large vessels called *receptaculum chyli*, and there, by a continued process of peristalsis, ushered into a duct which ascends onward through the posterior part of the lower abdominal cavity, through the posterior chest, and close to the back bone, and ends in the left subclavian vein. This is called the thoracic duct; this tube conveys the secretion called chyle into the vein named, and thence into the right side of the heart, into the right auricle, thence into the right ventricle, and from there it passes out of the ventricle into the walls of the air-cells of the lungs, where it undergoes a process of purification by exchanging the carbonic oxide for oxygen, and is thence returned to the heart—the left side of it—and from thence out through the arterial system to every part of the body as arterial, purified blood, having all the elementary chemical constituents essential to the building up of the tissues of the body; and this is the interesting part of the whole process of life—the starting-point of vitality from the food eaten; for be it remembered that all the above process has been consummated through the forces already in the body; but now we begin to furnish supplies for the perpetuity of animal life. We have the blood in the arteries—away out in the smallest terminals, even into the arterioles, and entering into the

capillaries — the terminals of the arterioles denuded of their outside covering, and so constructed as to be full of pores, or small holes, in their walls, through which the chemical elements are drawn as the blood passes through the capillaries on into the veins. At the sides of these capillaries there are terminal nerve filaments — the sympathetic and motor nerve footlets — and through these the process of selection and extraction of chemical elements needed for the surrounding tissue is carried on, whether it be lime, sulphur, carbon, hydrogen, phosphates or nitrates, and the unused of the elements pass on into the veinlets — the beginnings of the veins — to be carried back to the heart, thence to the lungs, to be rejuvenated again. Thus the process of circulation goes on all the time. In the vicinity of the capillaries, where the elements are drawn out to supply the deficit of wasted tissue, the waste is dissolved and pressed into the small tubes, called lymphatic tubes, and carried through them into the veins, beyond the capillaries, and thus we see that the nervous system superintends all the workings of this wonderful structure called the human body. This process goes on whether we are asleep or awake. *It is Mind directing every minute detail, from the manufacture of the first secretion to the last finishing-up process, which makes food into blood and then distributes it where needed, in all parts of the great house we live in — the house that mind built, and is building and replenishing from youth to old age, and finally finishing the work of construction and decay; and when we become old and worn out, it leaves this lump of clay and lets it go back to its original elements, and mingle with the clods of the valley, and we go out to join the everlasting hosts, freed from earthly environments, according as we have cared for this body. The mind is the We, the habitant, and superintends the house in which it lives.*

It will be understood that mind does not literally take hold of this body and move it of its own accord. The medium through which it directs is the organic nervous system, and the agencies concerned in the movements are the muscular system. There are five hundred and twenty-seven of these muscles (musculares), and they are said to be capable of performing at least

fourteen thousand movements; but each and every muscle is controlled by nerves ending in its structure, and no movement takes place without nerve influence. Any disturbance or interference with these filaments, called nerves, produces inharmony of action, and the disturbance is directly in the ratio of the disturbed nerves involved, considering the locality and the character of the nervous system as to function.

Seeing that the nervous system controls every function of the human body, is it not worthy of profound consideration and intelligent care? This proposition can not be so expanded as to get beyond the realm of mind influence through nerve filaments; for this understood, in all its relations to the human body, its association with all other things, embraces the entire field of thought. The structure of the nerve elements, and the keeping of them in proper condition, makes up all there is in the healing art. The only mystery is not understanding the mind which directs and controls the body. The forty-two faculties in the cranium are factors of the mind, and suggestion accepted, rules the body in its every relationship to environments. The constituents of nerve elements are essential to know in measuring the nerve power. These constitute the medium of communication to each and every part, and there are two things always essential to consider; and these are, first, the nerve supply, and second, its freedom from origin to terminus. These constitute the secret of the healing art. Whatever overtaxes, overstrains, exhausts the nerve elements, produces inharmony—disease. It may be due to lack of elements in the blood, or to pressure on the nerves, or to the *excessive use of the nerves ending in a particular organ* using up the elements which constitute the medium of power, which is Mind. This philosophy will have to be accepted by the healer, or his action will always be in the dark, vague, and merely conjectural.

THE LIMITATION OF NERVE POWER.

The nervous system, like everything else in this world, has its limitations, and to expect more than it is in the power or possibility of anything need not be expected. It is computed that the nervous system exhausts in proportion as it is exercised — used. This exhaustion of nerve power is more especially applied to the execution of functions, and not usually due to obstructed power, due to impingement or pressure. The difference has a perceptible distinction. For instance, a function may be abridged on account of pressure on the nerve filament performing that function, and no exhaustion of nerve power take place, as, for instance, in the genito-crural nerves, emanating from the second lumbar.

Some pressure may take place on the leash of these nerves, as they emerge from the foramina of the spine, and the functions be modified greatly, or even cut off, and when the pressure is removed, the function becomes established at once. Not so with the nerves ending in and around the eyes. for here we have no pressure, but through their overuse, overwork, exhaustion actually takes place, and there is an entirely different state of affairs, as regards the condition of the nerves and their functions, as well as a different treatment is necessary to adopt. Each condition must be taken into consideration when we apply Neuropathy.

For the pressure, we must remove it. For the strain, we must stop it and rebuild the elements exhausted before we can expect the functions to become established and able to perform their former function, for exhaustion of any set of nerves produces exhaustion of the whole organism, and the stoppage of the waste is important — in fact, must be done to restore the system to health. No exception to his.

THE IMPORTANCE OF NEUROPATHY.

The importance of Neuropathy can not be estimated, for through its application we re-establish nerve relationships which

have been separated for years, likely, and start forces which have been dormant, and which have kept the individual in a state of disease, without even a possibility of release through any other process of treatment known to mankind, which, when properly applied, changes conditions so radically as to start up new forces, which change the whole life of one who before was a confirmed invalid, bound down by hand, as it were, and whose very life had been incompatible with everything around, and with whom death or anything would have been a boon gladly welcomed, when in an instant the whole life may be changed to one of joy and gladness and supreme happiness.

Such is the nature and possibility of this science called Neuropathy, for through it we liberate the channels of communication of intelligence to all parts of the house in which we live while on this mundane sphere. This science frees all conditions possible to be set free, and so suddenly changes relationships that one is amazed at the possibility of such a thing being done, that it is wonderful beyond expression or comprehension, and Nature at once asserts herself. There are so many diseases cured thereby that we scarcely believe what we see. Nothing can be said to express the inestimable value of this science.

NEUROPATHY VS. CHIROPRACTIC.

The word *Neuropathy* expresses a relationship of the nervous system to some diseased condition of the nervous system — a pathological condition; whereas a term which means only “hand practice” has no possible relationship to disease. The term *Chiropactic* may be any kind of hand practice, and apply to *Massage* or *Suggestive Therapeutics*, *Swedish Movement cure* or “*The Laying on of Hands*.” So that we readily see that it, like *Osteopathy*, is a misnomer, and requires an explanation of the definition to make clear what it means — and then it doesn’t mean what it is intended to mean. Now, since the nervous system has to do with all pathological conditions of the physical organism, *Neuropathy* is the proper term to use, and we know what is meant when we say the *Neuropathic System*.

Then to attempt to make believe that bones are "dislocated" and require "fixing" savors of the supremest ignorance to an intelligent anatomist, and to make this sort of treatment what it ought to be, and what this author intends it to be, we should appeal to the intelligence of the people, and make no attempt to cover up the facts, with the idea of making merchandise of the people who have no way to find out different, and who are ready to believe anything said by their doctor.

This science, we are endeavoring to set forth in a clear light, will go down the ages, relieving its thousands, and it is to be hoped that all schools and physicians of every kind and name, as well as the intelligent layman, shall familiarize themselves with its far-reaching philosophy and benediction to the world.

WHY IS THE SPINAL TREATMENT SO EFFICIENT?

The efficiency of this treatment is due to the fact that it unites the "two forces," the "positive" and the "negative," and re-establishes the harmony, takes off the pressure, the result of irritation of peripheral terminals, which irritate muscular fibers, and cause contractions which close around small vessels which hold the fluids of the parts. Inasmuch as nerves end everywhere in the body, it is a fact that irritation may take place anywhere, and affect nerves passing through parts affected by the irritation, and contraction of the muscular envelope of these nerves irritate the nerves themselves, which end some distance from where the irritation is which affects the tissue in which the nerves end; so that we do not always find the cause of the difficulty where it seems to be. A knowledge of the human anatomy is an essential desideratum for the successful treatment of the various diseases which one is liable to be called to treat, and an intelligent explanation can not be too strongly urged upon the expectant student of this science, for many would-be practitioners fail simply because of their lack of knowledge of the system they pretend to treat. This system, to be creditably applied and the results of treatment eminently satisfactory, should be intelligently applied. A haphazard application often results unsatisfactorily to both oper-

ator as well as the operated, hence the importance of knowing how to do it correctly.

THE GENERAL GUIDE TO THE SPINAL TREATMENT.

As we have said elsewhere, we desire that there be no mistake about where to treat the spine for pains or diseases. We would urge the operator to become so familiar with the nervous system emanating from the spine as to know at once, if his client complains of a pain, where the nerves ending where the pain is felt may be accurately known (at the vertebra) where they emanate, and go to that spot to find the trouble, and treat there for it, resting assured that a certainty of relief will follow the proper treatment, oftentimes instantaneously. The student should become absolutely familiar with anatomy, so as to know where to find the origin of the various diseases which affect humanity, and then relief may be afforded without confusion. Remember that this system is not a guess-work system, but one which may be considered mathematically accurate, and results as certainly as day follows night expected. The mind, through the nervous system, remember, controls the whole body, and to be free means freedom from disease every and all the time. It is not so important that the operator be familiar with the whole of anatomy as it is the nervous system, for without this knowledge he is a mere automaton. One who knows nothing about this science only as "a punch in the back," is, like an accidental fall, striking something hard, and a cure of some chronic ailment follows and no one knows why. We do know why, if we know anatomy, and know this system of application as we should know it, and as we may know it, from studying this exposition of it,—and this is the first ever written on the subject.

THE KIND OF TABLE TO HAVE MADE TO TREAT PATIENTS ON.

It should be made twenty-two inches wide, twenty inches high and six feet long, with good turned legs, strong side pieces and ends, six-inch by one-inch board framed into legs, and the top of inch boards, with a box made on one end of top about two feet

from end, and eighteen or twenty-nine inches in length, so as to ho'd at least six good spiral springs, or the box filled with the springs, so as to make a space the width of the table, save the side boards, and twenty inches long, so that the springs may sit upright and come to a level with the top of the table, and they to be covered with strong canvas of heavy cloth, and the top of table to be upholstered with a good padding two inches thick, and all covered with pantosote, strongly drawn over all the top. This makes the kind of table which is used to treat the spine and neck of patients on. If it is desirable, the legs may be longer, so as to make an Osteopathic table thirty-four inches in height, including the upholstering, and then a stool used when treating the spine, for operator to stand on when treating the patient. The stool should be sixteen to eighteen inches in height.

THE NIDUS A SEAT OF INFECTION.

We have said elsewhere that no bacillus can be found or located anywhere in the body until a nidus is formed for their habitation. Whilst this is at antipodes to bacteriologists' views, we claim precedence when we are on the side of truth, not speculation. If bacilli are naturally generated in the body, why are they not disease-producers all the time (if they cause disease at all)? What assurance has man of health if he is the receptacle of a bacillus every breath he draws, and that germ is a disease originator? If man is a separate entity, possessing all the elements which make him a perfect being, and other animate creatures are also thus created, why should man have originated the idea that man (the only one of all of God's creation) should be amenable to a foreign and independent living animalcule which should, by a breath of air, a contact with environments, affinitize an animal that would work death to him? The very idea is preposterous, and as unreasonable as it is ridiculous to assume. Therefore we must disabuse the minds of deluded mortals of this insane fanaticism by a physiological citation of reasonable and indisputable facts, which are these: It is an admitted fact that

when the blood, if unimpeded in all of its channels through which it is wont to flow throughout the body, and the various other fluid-carrying channels are performing their normal functions, and the nervous system in every part of the body is performing normal functions, the condition denominated health exists, and that perfect harmony is equivalent to normal health.

We make this unanswerable statement, that no disease can exist in the body when the above conditions obtain ; unless there be some disturbance of the nervous system, either poisonous atmosphere inhaled, paralyzing nerve terminals and thereby interfering with their natural functions, or some pressure upon the leash or leashes of nerves ending in a part, or overuse of the nerves, or the nervous system, exhausts the nerve elements, rendering them incapable of performing their normal functions, and through these conditions interrupt the normal flow of blood and other fluids through their channels, no disease can exist. Anything whatever which disarranges the harmony of the functions of the body causes conditions which result in disease. These causes are legion, but in no instance whatever is bacilli the cause of disease, and they are harmless in the body when there is not a disturbance of function in the body somewhere which causes a nidus for their habitation. That special adaptability for their sustenance and propagation can always be traceable to the disturbance of nerve power, and when the nerve power is restored to its normality, and the obstructions removed from the vessels carrying the fluids of the body, disease is no longer a habitant of the body. Were this not the case, why does a certain adjustment of the spinal vertebrae absolutely annul typhoid, diphtheria, puerperal peritonitis, cholera, and any other inflammatory process, independent of all sorts of antidotal doses of vermicides, or any other poisonous substances called medicines, antidotes, prophylactics, etc.? Why is it that physical manipulations furnish more certain immunity from the ravages of typhoid than all the known modern therapeutic agencies?

The rational course to pursue in the treatment of all diseased conditions is to remove the causes thereof. This we absolutely

do in our method of applying Neuro-Ophthalmology. The influences of mentality upon the physical organism are duly considered and receive the consideration due them, for mind, through the nervous system, controls the functions of the whole being called man, and to ignore it indicates as much ignorance as idiocy could manifest, and the individual who does so now, in this enlightened state of human progress, is to be pitied, for he has certainly no place among intelligent thinkers or scientists. That physical adjustments are of the utmost importance is evident, for the mind directs the means indicated — properly enlightened — which should be applied to remove physical obstructions in the way of weights, pressure; and supplying elements indicated in every case and condition — turning the “switch,” “touching the button,” or opening the gateway through which power must be executed — directed to execute normal functions; then, and not till then, may we have normal conditions restored — health re-established.

THE INTIMACY OF ALL THE PARTS OF THE BODY.

When it is understood that every part of the body is mutually concerned with every other part, we can form some idea what effect the disparagement of one of its members involves. A pressure upon a blood vessel, for instance, will lessen the flow of the fluid therein, and this either cuts off the nutrition of the parts to which the blood is intended to pass, or, if it is an artery or a vein, it interferes with the return of waste material on its way to the heart, to be sent to the lungs for renovation, restitution, to be purified, so as to be again distributed to the various parts of the body which need repair. If the pressure be on a nerve, which receives all communications of thought, and which minutely distributes the intelligence to the various departments of the human being, that communication may be modified, intercepted or abridged, so that confusion at once arises, and the order which had been given to perform certain functions has not been carried out, and this makes confusion in that department, and consequently in all the rest of the great house we dwell in.

THE PEOPLE ARE SLOW TO EDUCATE.

The human family incline to follow the paths made for them, and are slow to investigate anything, except what is really forced upon them, or necessity compels them to consider. Habit clings to the majority of people, because of the dread of change. An old teamster follows in the "old ruts" regardless of their depth, when a slight change would put him on smooth ground. The man of "push" does not remain in the ruts. He gets out and changes his attitude to environments, and makes a road where none existed before, and explores new lands and turns the soil, plants and cultivates, and has the satisfaction of new and better things, even to new modes of getting about, and creates new environments in every respect. All advancement is the result of investigation, and those who will not advance are left in the rear, to suffer the consequences of inconvenience and sloth, ignorance and inertia.

THE REASON DISEASE EXISTS IN THE BODY.

When it is understood that disease is a condition, meaning "want of ease," and that the pressure upon terminal nerve filaments interferes with their function, and that because of this disturbance there is accumulation of fluids, blood, etc., in the parts where nerve function is disturbed, and that this accumulation of the fluids separates the end footlets, so that communication is cut off, and intelligence fails to reach the destination, and orders fail to reach their destination, and all because of separation of nerve fibers, from the accumulation of fluids, intercepting communication, hence action ceases in the motor fibers, and a circulation is interfered with, hence the congestion. Now we can understand why the sudden movement causes such immediate results; for it starts the action of motor filaments, and the vessels empty themselves and new fluids rush in, on and through, starting circulation where before it was impeded, or altogether arrested. The effects of relieving the congestion of the accumulated pent-up fluids are immediately noticeable, and the chemical changes at once are discernible in the glow of the countenance,

change of the feelings of the patient, and nature being permitted to assume its normal functions, harmony is soon established.

This treatment is a marvelous revelation concerning diseases, and shows conclusively the cause of disease is largely a product of nerve impingement; for the direful consequences immediately begin to be dispelled as soon as the nervous system is freed, and diseases which have existed for years oftentimes disappear as if they had been told to go.

Sometimes manipulations about the neck are needed to free the pressure caused by venous congestion, such as raising the clavicles and stretching the neck — lifting it up by force to free vessels which have been separated, by force of gravity, in accumulated fluids in veins. Frequently the neck may be treated the same as the spine, either on the side or posterior portion, using the sudden motion with care and judgment, being careful as regards force. Many conditions and pains are relieved by the neck treatment not otherwise effected.

The treatment between the shoulders about the second to the fifth dorsal vertebra is where bronchial and lung troubles are reached, and the treatment should be done once each day, or oftener, if necessary to relieve the pain and congestion involved; for this reunites the positive and negative forces, which, having become separated by cold, stimulating end filaments of nerve fibers, caused contraction of muscular fiber, and the drawing upon the nerves which control blood vessels, interfering with their functions, and thus caused the accumulation in the parts where the pain is found; so that we see the necessity of knowing the relation of the nervous system to the condition perceptible in the human organism. Function of any part of the body may be interfered with by pressure upon the filaments ending in the parts; for the nervous system, remember, controls every part of the body.

The functions of the stomach, liver, spleen (whatever that may be), kidneys, colon, intestines and genital organs of either sex are disturbed and disannulled by this same cause, and the lifting off of the pressure of the nerves controlling the function relieves the whole trouble. Puerperal fever (peritonitis), or typhoid fever, or any other functional disturbance, is amenable

to the same treatment; for all functional disturbances are the result of pressure upon the nerve filaments ending in a part. Kidney affections are all traceable to the same source, and the difficulty is most generally found about the eleventh or twelfth dorsal vertebra. That condition called sciatica is traceable to the lumbar region—about the second—where the leash which forms the bundle of nerves takes its exit from the spinal column, and passes through the great sciatic notch and thence down the limb, and liberation from pressure high up in the lumbar area often ends the whole difficulty; for the small filaments begin to go out from the leash as soon as they escape from the spinal cord, and ending everywhere along their course from their exit, we can account for the pains often felt even above the pelvis and sacrum, and gradually descending until the whole limb may feel the pains caused by the pressure in the loins. Hence it is proper to treat all the way from the exit of the leash to where the leash passes through the great sciatic notch, which may necessitate movements of the hip joint, as per Osteopathy.

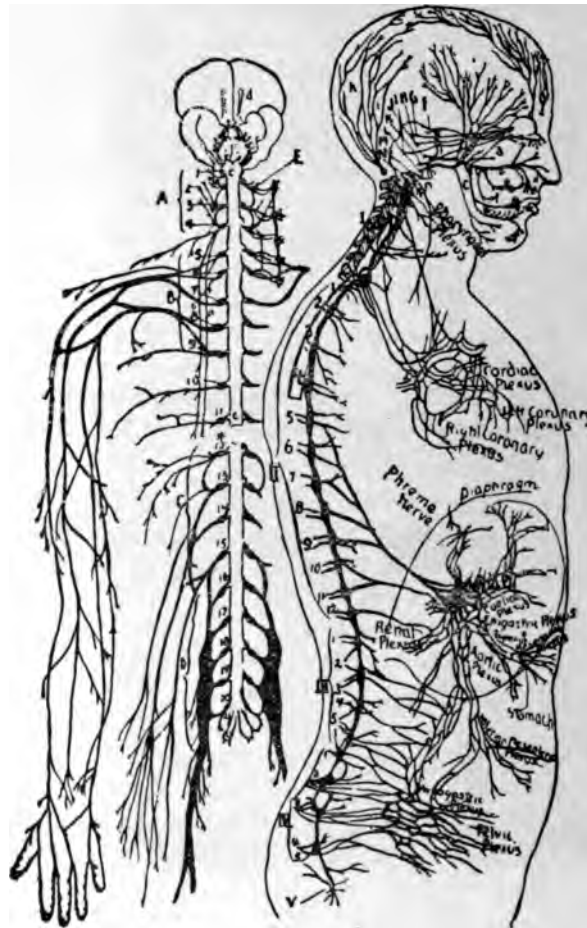


FIGURE 1

FIGURE 2

Cerebro-Spinal and Sympathetic Nervous Systems.

CATARRH AND KINDRED AFFECTIONS.

Without entering into the details of complications, causes, etc., of this prevalent complaint, our attention will be directed to the treatment. The various theories as to cause are as varied and numerous as are the remedies suggested. It, like all other functional disorders, is a nerve trouble, and caused by irritation of terminal nerve filaments, producing muscular contraction, and obstructing venous blood in the mucous membranes and sub-cellular tissue. Congestion is the consequence, and separation of nerve footlets occurs, and capillaries are choked, and there ensue chemical changes; and first a watery exudate occurs, then the more constituent substance, mucus, then inflammatory processes take place, and a chronic disorder of mucus continues until all of the choked secretions are exhausted, and there is either a contraction of the epithelial surface, or a deeper structure, and inflammatory products result.

A more serious sequela than this may ensue—that of oedema—affecting the periosteum, and even involve the bony structure itself, when the exudate is green and offensive. These conditions are generally classed among the catarrhhal affections. The causes are as stated above. Constant wetting the hair is one common source of catarrh, and should never be done as a “habit.” The water evaporates, and coldness is the result, then contraction of muscle fibers, then choking off of the venous circulation, and terminal nerve irritation produces contraction of muscular fibers, hence obstructs venous circulation, and chemical changes occur. Whether the cold be from wetting the hair, or locally applied in other parts of the body, the effect is the same. Pneumonia is caused by exposure of terminal nerve filaments to too much cold, and generally results from cold between the shoulder-blades and chest muscles — about the first to fourth dorsal vertebra; and

there is one of the principal places to treat the system to relieve the nerve impingement and to relieve colds in the chest — in the lungs, as well as for coughs and asthma, bronchitis and all lung troubles, acute or chronic.

In bathing the head, it should be done with care; that is, as regards exposure to the air for an undue time. It should be done hastily, and the hair wrapped in a napkin until thoroughly dried; then there is no danger of taking cold from bathing the hair. The natural way of doing things is always the proper way to do them. Cleanliness may be observed with scrupulous care; but even common sense is required to do it right, and as all people need to be taught how to do things, we have aimed to do our part.

The congested condition of the blood necessarily increases its density, and especially when the watery portion exudes from it, through the small channels of lymphatics leading to the mucous surface, leaving the normal constituents deficient, and the stasis of the blood having caused chemical changes to take place therein, irritation ensues, the tissues dilate, a greater accumulation of lymph infiltrates the tissues and fever ensues, and any condition may take place in any of the tissues involved and we may have any sort of affection to which mucous membranes are liable — enlarged tonsils, scarlet fever, diphtheria, malignant sore throat, and closure of the frontal sinuses, eustachian tubes, causing deafness, or even diseases of the trachea, bronchial tubes, even down into the finer ramifications of the lungs, culminating in pneumonia, or even tuberculosis, and not a “bug” be involved in the case. The fact is, “BUGS” (bacteria) do not cause diseases. There never was a flimsier excuse for diseases than the “bug theory.” If these are involved in the case, it is after the disease is advanced sufficiently to form a nidus for their habitation, and under these circumstances may do harm; but healthy blood is certainly not infected with them. It is a singular fact, notwithstanding the asserted cause of typhoid fever having its origin in a specific bacteria, that a good, strong *spinal treatment* *knocks the bugs into “kingdom come,”* and stops the fever as if by magic, so that if the “bugs” were the *causus belli*, they are an army with very weak fortifications! The facts are, as stated elsewhere, when

the two forces are united (which is a result of proper spinal treatment), the *cause is removed which perpetuates the so-called typhoid fever* (bacilla), and Nature restores the normal conditions to harmony, and the fever vanishes like frost before a warm morning sunshine.

The same is true of many — in fact, all — other functional disturbances. The freedom of the fluids of the body to circulate insures the individual against diseases of all sorts. The unimpinged and non-exhausted nervous system throughout the body furnishes, of all things, the surest immunity against diseases. These are the prophylactics, the remedies for all ills of a physical character, and in all places at all times; hence the greatest boon in this regard the world has ever known, and these principles will be recognized in time. The absolute results of this method of relieving human suffering commend it to one and all alike, and it is so simple and easily understood that all may appropriate it — use it.

The use of disinfectants constitute an essential element in the treatment of catarrh and all mucous membrane affections, because the exudate is more or less infectious, and contact with healthy tissue sooner or later influences it for evil — by what we call *catalysis*. *Salt is the best disinfectant known*, and the least harmful of all known to mankind. Three-fourths of the surface of the earth is covered with a strong solution of this wonderful health restorative agent, and almost everything else has been resorted to that inventive genius could devise and fraudulent schemers could concoct to deceive the deluded sufferers. The first, the best, and *only natural remedy*, as a local application, is *salt*, in various strengths of solution, snuffed up the nostrils, and back through the posterior nares into the throat, or forced there by a spray instrument in the form of a nebulizer, which may be purchased at any drug store. The strength should be in the proportion of one tablespoonful of common table salt to one pint of water. (Don't guess at it; measure it and be sure.) This solution should be used three or four times at a sitting, and three or four times each day. The patient should be instructed to use considerable force in drawing this up into the nostrils each time.

It should be gone at in a business way — no foolishness about this — and stick to it until cured. It will hurt, if there is much inflammation in the nose; but don't mind the hurting; use it every day as above directed, and it will cure the catarrh in about six weeks to two months. This should be used occasionally afterward, when there is a seeming incipient catarrh of the mucous membrane, and no other remedy will ever be needed for that sort of trouble. The patient must be taught to take, and to continue deep breathing at stated intervals; for it will be remembered that deep breathing insures "*purification of the blood,*" for no disease will get well without *oxygenation of the blood*. If all would observe these directions, there would be no necessity for changing climates for catarrh, or any other disease. *Breathing is as essential as blood itself, and the blood soon dies without coming in contact with the oxygen of the atmosphere,* and this air is in proper proportion. All one has to do is to open his nostrils, close his mouth, and let God's pure air enter his lungs, in sufficient quantity to inflate all the air-cells of the lungs, to be well.

When there is a catarrhal condition of the eyes, the application of salt water, in the proportion of a tablespoonful to a pint of water, is the remedy par excellence. This should be applied by means of soft cloths, wrung out of the above solution, and applied on the outside of the eyelids, across the nose, covering both eyes, and rewetting these cloths at intervals of five minutes, continuing this course for half an hour, or even more, at a sitting, and repeating the treatment two or three times a day, depending upon the severity of the condition involved. *If there is pain in the eyes, always use the application as hot as can be borne by the patient, repeating applications every few moments until relieved; and it is best to exclude the light from the eyes, or be in a darkened room.* If there are *ulcerations on the cornea*, be sure to stretch the upper lids by introducing the finger under the lid at the outer canthus, palm surface next to under surface of the lid, thumb outside; now gently pull the lid from the cornea, and with a sliding motion, step by step, as it were, with thumb and finger squeezing the upper lid as the steps are being made with finger and thumb along the whole under surface of the lid. The fingers should

always be unquestionably clean, and care being taken to keep the nail of the finger, turned to the cornea, in the inside of upper fold of lid, and having the finger wetted in water—or the salt water solution—before introducing it into the eye.

It is necessary that these details be strictly followed, for this is not advised simply for “fun,” but to relieve the sufferer. This instruction means something, and is not like any other treatment known, outside of what I published in my book, “Osteopathy Illustrated.” To those who have used that book, what is there taught needs no commendation, as it speaks for itself among all who have used it as directed. The use of these means will astonish the user, especially in cases of granulated eyelids, for the removal of the pressure does the work. Of course, the correction of the hyperopia should receive due attention so as to insure against future attacks, not only for granulated eyelids, but for the ulcerations on the cornea.

THE BIO-CHEMICAL ELEMENTS—TISSUE ELEMENTS.

It would be disregarding a large field of our nature to neglect to say something about tissue elements, when these are what constitute the physical make-up of our bodies. These elements are sometimes deficient in the food we live on, and the results are apparent to an observing mind. The nervous system is the medium through which all thought-communication takes place, and these are made up of the elements from the blood, and these from what is eaten; and inasmuch as the elements are essential in the nerve structure, for normal communication of nerve power, we should pay attention to this part of our means to arrest the nerve waste—relieve the nerve strain—which, if continued, would intercept results our treatment is designed to accomplish. No case will be in a normal condition unless the elements are supplied, either by the use of the food containing them, or supplied by direct means—that of furnishing them to the patient. These, be it understood, are not medicines in the common acceptance of the use of that commodity, but one of the elements of the system essential to its very existence and harmony. These are

the things we recommend to the patient in the change of diet, in the change of living, in the change of habits.

There are certain characteristics Nature manifests when there is an excess or a deficiency in these elements, or any one of them; and unless supplied in food, should be otherwise. They are best supplied in the form of two-grain tablets obtainable at any homoeopathic pharmacy, or of almost any homoeopathic physician. It is well to study this department thoroughly, as well as the dietary list found elsewhere in this book, which will generally be found adequate to satisfy all cases; but should it not be, resort should be had to the tissue elements.

To object to this would only exhibit a narrow-minded prejudice, unworthy the thought of any intelligent person. Nature demands a substance to manifest itself in, on, or through. The Schussler Tissue Elements are the best in general use, and are nicely put up in bottles in potencies. The third to the sixth potency are the most commonly used. There are twelve of them. It is a remarkable fact that, when rightly used, the system is always benefited thereby. I shall not enter into a description of their uses, for this is fully explained in other books especially devoted to the subject, and it would involve more time than I care to take to elucidate this subject fully; so I shall only recommend the reader to refer to this subject as his interest demands, and as necessity compels their use.

DISLOCATION OF VERTEBRAE THE CAUSE OF DISEASE.

Dr. D. D. Palmer, of Davenport, Iowa. roundly asserts that "pinched nerves are the cause of eighty or ninety per cent. of all diseases" ; and he also asserts, and states in his journal, that "all nerves which influence any part of the system emerge from the spine." That he is mistaken in the latter expression one only has to refer to nerves which come from the brain, end in the nasal organs, in the eyes, in the ears and teeth, which are certainly not spinal nerves. What part of the spine does the sixth nerve come from? What part the fourth? What part the auditory? One only exposes his ignorance by such assertions. No science can be strengthened by assuming too much for it, nor about it.

That there are impingements of nerves along the spine we readily and freely grant, and know to be a fact; but to assert that luxations, or even partial luxations, as he is wont to assert, are responsible for nerve impingements, we most emphatically deny. Any one who ever examined a spinal column can very readily see that to dislocate a vertebra, absolute violence must be inflicted! When a vertebra is luxated anywhere, a paralysis immediately ensues to all parts below the luxation, in which the nerves coming out of the foramina below the luxation occur, and suspension of all functions where the nerves below the part end. The most easily luxated vertebra is said to be the fifth cervical, and it requires a direct force to produce such a condition. Simply the deviations of contour of the spinous processes do not prove luxations, for the bones are in no way luxated necessarily, because the processes deviate; even in curvature there is not generally a luxation, if ever, but simply an abnormal muscular atrophy on the concave side of the curve, due to primary irritation of nerve filaments ending in that part — squeezing the blood out, lessening

nutrition, and producing permanent contraction. A condition of gradual nerve-waste goes on in the muscular system anywhere the muscular system contracts permanently, or for any considerable length of time, which is the condition in all cases of spinal curvature. Contraction of muscle is a prime factor in drawing the spinous process aside—that Palmer calls luxations. The facts prove otherwise generally.

The very structure of the bones of the spine show a compactness which precludes the very idea of "luxation." It is a known fact that white cartilaginous tissue is *non-elastic*, and that sort prevails in the make-up of the coverings of the spine. The white fibro-cartilaginous tissue has the property of toughness, but not much elasticity, and between the vertebrae there seems to be a degree of sponginess which affords a spring-like cushion, preventing, perhaps, brain concussion in sudden movements, as in walking and jumping.

The cartilages which hold the vertebrae together possess a large quantity of that kind denominated white fibrous, non-elastic constituents, and is strong enough to draw the periosteum from its attachment before giving away, or stretching perceptibly. With that sort of tissue on the anterior aspect of the whole spinal column and sides, and the various fibro-cartilaginous attachments to the posterior aspect, including the lamina and processes, with the five layers of muscular fiber and their fascia, it would seem strange that a little contraction of a muscle, through nerve irritation, should cause a *luxation!*

We are inclined to attribute the belief of spinal luxation, or sub-luxation, to a morbid mental conception, rather than to anything else. Hence luxations of the spine are not causes of disease. That is an assumption without the shadow of a possibility only in cases of positive violence.

Then how do you account for spinal adjustment? We have no assurance of adjustment where no luxations exist, and when they are not out. That spinal treatment results are certain and astonishing we accord knowingly. That they are brought about by restoring luxated vertebrae we as positively deny. There is no accounting for the theories promulgated by Dr. Palmer. Having

been familiar with his assumptions since 1898, and knowing his peculiar bent of mind, we hesitate not to state that his "adjustment," as he terms it, does good; but his theories are amuck. He advocated "ankylosis" at one time as the cause, but I have not heard of that lately. His assumptions do not annul effects, for great good results from spinal treatment.

"THE PINCHED NERVES"—"LUXATIONS A CAUSE."

There are certain persons who are wont to believe assertions regardless of a reason. Any sort of a reason seems to satisfy some that a thing is so simply from the fact that it is said in connection with a thing they do not understand. The "mysterious" always has been a bane to human progress. Let one become fascinated with a delusion, and there is an almost absolute suspension of reason. But one faculty in the brain is excited; it being utterly devoid of reason and having no limitation, carries the subject clear out into space, and generally leaves him there alone and wrapped in hopeless delusion. Ignorance of what one's faculties are, and what they stand for, and what a healthful combination is, and the results thereof, are questions but little heeded by the masses; this has produced the "floundering" for ages, and set at naught many well-meant problems.

A man says he "originated an idea," and if, perchance, some one else had the same idea for years, the latter, having more combativeness and approbateness and executiveness, springs it upon the public as "his own," and no reason offered, nor absolute proof, changes the idea in his brain; and being "acquisitive" to a large degree, persistency, characteristic of the faculties which lend support to the other faculties, holds sway, and the fight continues. There may not be a single principle involved, but the stubborn will holds out to the very last, despite of reason, common sense, or truth!

Any philosophy, to be beneficial to the people, must be reasonable, provable and simple, easy of application, effectual in the line claimed. If every man would be honest enough to recognize the limitations of human power, and the circumscribed limitations of

human intellect, the world would be better off. Old rubbish must be eliminated, new thought investigated, and practical principles applied and fully demonstrated, and be molded in the mind long enough to become fixed, then the world will be bettered, by being filled with what tends to uplift everybody. When men and women of matured intellects shall be the educators, instead of young girls, and boyish urchins are eliminated from our public schools of learning, and proper mental thoughts imbibed from mature minds, the world will be on the road to progress.

WHAT CONDITION DO WE RELIEVE IN SPINAL TREATMENT?

Inasmuch as we deny luxations being the causes of nerve-impingements, we proceed to state the reasons for results obtained in this peculiar treatment. That want of normal elimination of waste material — lack of metabolism — allows accumulation in the tissue, we have reasons to believe, and that these accumulations separate nerve-end footlets, and the accumulation presses against sensory fibers, causing pain, is doubtless the case in many instances. Then, as we have said elsewhere, that two forces control the entire physical organism, the separation of the poles of these two forces allows of an excess of either the one or the other products of the forces to accumulate, and if an acid in excess accumulates, irritation ensues, producing contraction of muscular or other tissue, and pain is the result; and if the negative force predominates, a breaking down of the tissues takes place, and hence we have boils, typhoid fever, or any other condition which chemical changes may produce anywhere in the body where the end footlets of nerves are distributed.

This is verified in the fact that when we have an excess of the positive element in the stomach, we have colic, and the treatment of the spine, from which point emanate the nerves which end in the stomach, positively and instantaneously stops the pain — the colic. That same kind of result takes place in typhoid fever, diphtheria, or any other condition involved. This accounts, rationally, for the two forces governing all action, or result of pressure, accumulation or atrophy of muscle, spinal curvature, or

whatever pathological condition is manifested in conditions called disease. The "adjustment," as Dr. Palmer calls it, of the spine unites these two forces, and a neutralization of the acid and the alkaline elements ensues. The stimulation resulting from the treatment increases the metabolism, and elimination of the accumulation in the parts is dispersed, and blood is allowed to flow and nerves are freed from pressure, and, their end-footlets united, harmony is restored at once. Every case on record of relief is a verification of this two-force influence.

FURTHER CONSIDERATION OF THE DISCOVERY OF CHIROPRACTIC.

“INTELLIGENT NERVES,” “EDUCATED NERVES,” “THERMAL NERVES.”

Some people become wise above what is written, as well as what is discoverable, or exists. Assumption, without proof, is simply an indication of mystic tendencies — something beyond the ken of mortals to search out.

If there existed a necessity for “educated nerves,” some excuse might be permissible to desire them; but as no such necessity prevails, and as there could not, in the nature of things, be such a thing, we simply relegate the thought back to the realms of the unknowable — the Arcana. A man might as logically say a toe-nail could be educated as a nerve. Education only applies to the mind, and as nerves have no mind, they do not come under the domain of a growth in knowledge; so that is the end of such a thing. *Est ad absurdum.*

The same may apply to “thermal nerves.” Nerves are only the products of elementary constituents — simply selected matter formed by mind into tubes for the purpose of conveying thought, as an artery is formed for conveying fluid, each having only that special function — so it would be out of all reason to attribute functions to physical material without mind to direct results. The medium through which all action takes place in the body is the physical structure; but all and every cause of manifestation is mind. When the channels are *pervious*, a normal condition exists everywhere in the body, and a disturbance of the media anywhere along the line, from origin to terminus, intercepts communication

of thought — mind — and inharmony is the inevitable and absolute consequence.

All development, in all parts of the body, results from deposition of the elements carried there in the blood, through the arterial system ; and the mind, through the nerves, superintends all growth, metabolism, and every other function which takes place in the physical organism. If this matter was understood, it would obviate much confusion and wild and hypothetic, unreasonable speculation, simply to bolster a self-laudatious egotism. One fact is worth more than all the theories in the realm of hallucid imaginations.

WHAT EVERY READER OF THIS BOOK SHOULD CERTAINLY AND PERFECTLY UNDERSTAND.

It being a principle in the Neuropathic Science which governs the law of treatment we so wish to be understood, and not to treat diseases by *name*. Find what particular set of nerves are involved and so treat the patient as to relieve the pressure upon them, and success will always follow ; your desire will be accomplished. For instance, when there is pain in the head, determine whether it be due to pressure upon nerves ending in the part pained, or due to the impingement of nerves ending in the stomach, due to sour stomach — too much gas in stomach — and if that be the case, the indications are plainly discernible: the spine needs attention right at one of the splanchnics ending in the solar plexus. That treated, unites the two forces — neutralizes the excessive acid and the pressure ceases — the pain ceases at once.

No one need expect to be an expert in anything until he masters it in every detail. This book would not be within the bounds of a reasonable capacity were it to deal with a specific explanation of the commonly accepted pathology of the schools, and delineate every special symptom — pain — and trace it to its origin, and then specifically describe each and every movement necessary to right such conditions. The one who deals with this science is expected to have learned the philosophy concerning the facts upon which the science is based, and then be able to apply

it on general principles, and by so doing will be able to meet emergencies as they occur. Remember that the nervous system is to be freed from pressure as well as strain; and if the trouble is found in the spine, treat the spine; and if in the nerves ending in the eyes, see that means are instituted to stop that strain.

This is not a guess-work science; it has specific lines of indices, and the one who wishes to make a safe and certain journey to the goal must know the route to travel, and can not be certain unless he can read the guideboards at each turn of the road as he travels along. This is not a conjectural, blind way, but the way is plainly blazed all the way, and there are special lines on all sides which point with unerring certainty which way to travel to be sure to get into the right way — simply read the signs as they loom up before one. Remember that the whole man is involved in the nervous system.

FUNDAMENTAL PRINCIPLES INVOLVED IN NEUROPATHY.

While each particular leash of the nervous system has its origin in the calvarium, and ends in a specific locality, and controls where it ends, yet with all this, we have, as it were, a general superintendence through the sympathetic nervous system, a general relationship throughout the entire body, so that “when one member suffers, all of the rest suffer with it.” There are no “preferred classes” in the human body, and each of its members receives the same supervision, and all are useful in the body to constitute the grand total, the grand consummation into a universal cosmos — a world. There being at least forty-two of these centers, all of them having specific functions to perform, we get at some sort of a system, or order, as to their functions by their effects in the various parts of the body.

In the calvarium, mind begins its mission. Here, at the starting-point of the nervous system, mind begins to diffuse itself throughout every tissue in the body, so that, from the origin of the nerves, mind permeates to their end, and there the effect is manifest. These fibers end around capillaries, and superintend the selection of the various elements from the blood, through the walls of the capillaries, which build up the tissue in their vicinity,

which has survived its relationship to the surrounding tissue in that part, made it soluble, carried it back through the lymphatic tubes into the veins, and they into the heart; thence it is passed into the lungs, there oxygenated, and is returned to the heart, thence to the various parts of the body to rebuild wasted parts; and so this *eternal round goes on from moment to moment* while life in the body lasts. The necessity of all the vessels being free from obstruction, so that all these fluids are permitted to circulate into their various departments, seems essential, and it must be; for should there be any delay in any part of the body in the onward course of the fluids, the accumulation at that point separates nerve filaments, and a disturbance follows from local pressure, which changes the blood, and these being the changes which are incompatible with the tissue, or the surrounding tissue, a change of all the tissue involved ensues, and we have a nidus for starting a condition called disease — even an organic disease — for a change of tissue takes place which is altogether different from the normal tissue, and the nature of the disease depends upon the character of the tissue involved where the accumulation takes place. If the congestion is only temporary, only a disturbance of function ensues, and when the accumulation is dispersed, there is a return to normal functions of the parts involved. The order of the processes of life in the human body are regular, uniform and exact — perfect in all parts of the body when it is normal. This, then, is the natural order of its workings, and it should be the business par excellence of the pathologist to see that such be maintained, and if found wrong, to right matters, so that Nature may perform her functions naturally.

From the forty-two nerve centers we have a per-functionary effect in all parts of the body as every member has need. How this is carried on is largely conjectural, for we are not permitted to even see its workings, but are allowed only to see its effects, and as certain causes are followed by certain effects, we reason from the one to the other, and by these arrive at conclusions. The development of these centers of the cranium has been the careful study of phrenologists for many years, and it is a fairly well established fact, as we know, that the mind from these centers diffuses

its influence as the individual thinks. From these observations we learn that the mind, through the nervous system, controls the body, builds it, supports it, tears it down, and all from the material it received from without. This is all done through the suggestions received through the five senses, and from the elements in Nature it takes its supply and appropriate what it needs when left to Nature.

PATHOLOGY.

This phrase means "The Science of Diseases"; that is, the knowledge of the difference between a healthy and an unhealthy condition of the body.

The various conditions, called disease, are affections which are different from a natural or a normal state. "The change of a normal to an abnormal condition," is the most appropriate way of expressing it. The changes take place in the body anywhere. Disease may be local in its nature and effects, or it may be general, affecting the entire body. Disease means "want, or lack of ease." It may be characterized by severe, or a modified uneasiness in a part. The manifestation of pain or uneasiness, anywhere in the body, is an indication of local or general disturbance of the nervous system. The term *Nosology* means, a classification of diseases, or naming them. The name usually indicates the locality it is found to affect, the organ or tissue; or the location of the pain, heat, redness or swelling perceived by the person or the observer. The classification is made with regard to the nature of the structure involved.

The term *Sciatica*, for instance, indicates that the diseased nerves in the sciatic arc are involved—inflamed or irritated—to that extent that they become painful. The disease may be a result of impeded venous circulation in a part of the body or limb, and press upon small nerve filaments, and these filaments may end in muscular tissue, and interfere with arterial circulation of the blood in the capillaries; and the blood may accumulate and press upon other nerve filaments, and a condition called congestion of blood takes place, and disease results. Diseased conditions are the product, or the consequence, of nerve disturbance, either primarily or secondarily; for the nervous system is the medium through which all control of the body is affected; and

any disturbance of the nervous system may cause pain, or disease, or a change from a normal to an abnormal condition. Thus the reader can readily understand that disease is not an inherent state, or a normal condition of the body, but a product of nerve disturbance. The disturbance of the nervous system may be a result of various causes, and the nerves may be affected anywhere, at their origin, or at their terminations, and to any degree.

The disturbance may be simply a slight irritation, a strong pressure, or a destruction of the nerve itself. The result will be, as a general thing, in accordance with the amount of injury or disturbance of the nerves involved; for the nerves express themselves at their endings, and the organ in which they end; they express themselves, and the degree of function, and the kind of function has much to do with the result of the disturbance.

The various conditions and modifications, and varieties of conditions, called disease, seem to be the stumbling-blocks over which many fall and wonder why certain conditions are to be treated differently from other conditions, or no effect need be expected, as to the amelioration. While it is a fact that certain conditions require special attention, different from some other conditions, known as disease, many are puzzled on account of the reason therefor.

The majority of physicians have but few remedies they prescribe, yet they treat many conditions with these few medicines. The better informed physicians treat the patient for the purpose of restoring the harmony, and for the purpose of bringing about certain conditions in the body, and rest results when these conditions are brought about. Whilst they may have specifics for certain conditions, they have no specifics for what is commonly denominated disease. There are certain conditions which indicate a change for the better, and these are what the physician seeks to bring about by his medication; and when that is accomplished, he is satisfied that the diseased condition is subdued and will terminate favorably.

The physician who treats "disease" is unsuccessful, for there is no relationship between disease and medicine. Conditions are the things to consider always.

If one has a fever, it is due to disturbance of the nervous system, and the circulation of the blood is interfered with, and is a prominent factor in producing the condition. Hence, the attention should be directed to a restoration of the normal circulation of that element; and when that is accomplished, the fever—the effects—cease. When there is inflammation anywhere in the body, it is always due to impeded venous circulation where the manifestation is expressed—or with the vessels leading from that place which carry the fluids back to the heart—and these are the veins. They being free the trouble is over and a return to a normal condition ensues as fast as the congestion is dispelled.

These are the general principles of treating all pathological conditions called disease. There are three conditions which exist in all pathological conditions. These are invasion, retention, enervation, and these constitute every known condition we have to combat in order to free the system from disease. All of these conditions may be found in all diseases known to humanity, and are what we have to consider. It seems to be unnecessary to pay any attention to the names of conditions called disease, after considering the foregoing statements of facts; for we have to do with conditions which must be changed before diseases, so-called, can be removed; that is, what is regarded as special affections in various forms and localities throughout the body. To be specific and direct, the reader's attention to what must be done, seems sufficient for all who make this science a study.

Inasmuch as all conditions are products of nerve-waste—nerve irritation—nerve disturbance in some way, it seems plausible to assume that when we *remove* the causes of the disturbances, wherever found in the body, we have done all that is necessary to do—all that nature demands.

The various ways recommended in the body of this book will be sufficient to accomplish all that can be accomplished, and the one who applies the principles thereof intelligently and understandingly, will find his efforts, generally, satisfactory. The philosophy is correct, and the science, when applied conformably

PATHOLOGY CONSIDERED.

SPECIAL DIRECTIONS TO THE MANIPULATOR OF DISEASES.

In the analysis of diseases by the "yard stick"—the trial case—the condition of the nerve-power is ascertained and the indications revealed as to what is needed by patient. The *arrest of nerve waste is the thing to be done*, and the "tank filled," and these meet the case absolutely, whether one knows a single thing about the special Pathology or not. The thing one *should know* is how much nerve power is being consumed daily; and if there is enough to produce exhaustion, that must receive due attention, and then NATURE does the rest, if she has the right material to replenish the waste—in food, air and water.

If there is spinal trouble, that must be looked after and corrected. All bodily complaints are due to nerve strain or nerve pressure, and these must be attended to intelligently in order to render the aid necessary to restore the afflicted to that condition called health. We have said elsewhere that any bodily disorder may be relieved by the proper adjustment of the spine, and to verify this assertion the experience of the manipulator will bear us out. One does not need to know there is any particular local disease, for an examination of the spinous processes will reveal the fact of soreness somewhere along the sides of the vertebrae, or some *disparagement of contour*, and either of these conditions will be sufficient index to point out the trouble, whatever it is, and when that condition is righted, restoration at once ensues; sometimes at once, and at other times it may require several treatments. In many cases, Osteopathy comes in excellent use.

Remember that these things announced in this book cover the ground of treatment for all functional, human ills, and when understood, will not only take the prejudice out of one, but will be

found to be the right things to be done when properly applied, and may be relied upon with full confidence of absolute satisfaction in all functional disorders.

THE QUESTION OF DIAGNOSIS AND PATHOLOGY.

In the general practice of medical treatment, one is asked: What is the trouble? What is the name of the affection? It would seem from these premises that the name had more to do with the case in hand than the treatment — than the means used to relieve the condition. We assume that “pathos” means “pain,” “disease”—want of ease, and that what is commonly called disease is due to some interference with the nervous system, ending in the part diseased, and knowing that nomenclature is an arbitrary signification as it is applied, and the name does not let in any light upon the real condition, and that no single organ can be affected for any considerable time without the whole body becoming implicated, therefore the nomenclature would soon be swallowed up into a general dyscrasia, and per consequence the name would be absolutely misleading and erroneous.

We would say further in reference to pathology, that the reader need not be mistaken as to our position in regard to nomenclature; that names are given to diseases on account of the particular locality involved, as a rule, and have no special signification as to pathology. For instance, “pneumonia,” which means inflammation of the lungs; “tuberculosis,” inflammation of a tube — applied to some tube in the lungs — meaning a diseased spot; and so we might say of all conditions called pathology. While it is well enough for the practitioner to understand pathology, it can only be a source of satisfaction as regards locality of a disturbance, rather than indicative of what to do for it, unless, perchance, you wish to do as some medical practitioners do, treat the name without regard to the nature of the disease! Do it remembered, we do not treat chills, flux, colic, rheumatism, nor any other disease. Our treatment is directed to the *cause* of the difficulty, and the removal of that cause!

It is a fact, proven by much experience and close observation, that it makes no difference what name a disease is given.— that it

has a cause for its existence somewhere in the nervous system, and as soon as the impingement which interferes with these nerves is removed, the disease, however malignant, acute or chronic, changes itself into one of health, be it typhoid fever, puerperal peritonitis or a headache; and this is what should be considered, in preference to spending time to find a "bug" to accuse of causing the difficulty, when the poor little mite found its way to the pathological spot, after the nidus was formed by the decomposition of the tissues involved, due to the paralysis of the nerves ending in the spot or region diseased, and not as a prime factor in its cause. We detest a theory which has no possibility of verification from actual demonstration. As long as the vague notion of the "bacteria theory" prevails we shall have foolish and ignorant followers, who will continue to be duped and deceived, and pay big money to the deceivers.

The individual who becomes wedded to a theory, and when asked to demonstrate it and has no proof, it is wisdom to leave that individual to his theory and resort to some one who has a system which can be proven, and unquestionably demonstrated, before the eyes of the commonest mind possible to be called sane. The physical body is a cosmos, and must be studied to be known, and when as much study is devoted to its complications, changes, and relation to environments as is given to theories concerning outside agencies, as a cause of diseases in the body, we will have less nonsense in books, and less sickness, and quicker relief when ill. The question of pathology resolves itself into nerve strain and nerve pressure, and freedom therefrom, uniting the two forces, disease will be as easily controlled as eating a meal, and with as much dispatch. We shall hope that this system shall have started a thought which shall revolutionize the world of practitioners and put them to thinking along intelligent lines, which will culminate in great good to humanity by applying the true methods of healing.

To illustrate what we mean, take, for example, a case of indigestion. We find that one of two conditions of the nervous system causes it: either the spinal nerves about the seventh or eighth dorsal are impinged, or there is hyperopia. We need not

know anything about what is going on in the stomach, only that food causes pain, accumulation of gas and indigestion of food are the prominent characteristics. We haven't a single thing to do with the stomach, for the difficulty is not there, but in the nervous system, and correction of the nervous system, whether in those ending in the eyes or those emerging from the spine, sets matters to rights. The digestion of food, depending upon the character of the secretions formed in the various divisions of the alimentary tract, and these secretions are made up especially, for specific purposes, in the several glandular systems along the alimentary tract by certain nerves ending therein; and these nerves perform normal functions when in a normal condition; so it will be readily understood that the proper thing for the cure of any condition is to correct abnormal conditions of the nervous system, and nature cures.

WHAT IS PATHOLOGY.

In all of the books published on disease, the word "pathology" heads all conditions called disease. It simply means "nerve pain," and yet diagnosticians are wont to say a great deal about everything else but pain, or even the involvement of the nervous system.

It is only necessary to state here that we need no introduction to pathology, neither is it a part of the curriculum of neuropathy; for we start out with the nervous system, and that is really all we have to do with, in this science, as we show that all disease means is a result of nerve pressure. This fact known, all we have to do with any individual as regards a disease is to remove the pressure from the nerves involved, and pain ceases, disease quits,— pain ceases; harmony is restored; nature is satisfied, and the patient is restored to health. Such names as are used by the medical profession are considered irrelevant only in so far as organ or locality is concerned. The Neuropath does not treat names or disease, neither does he use medicine. His whole duty, and all that is needed to be done, is to remove the offender, the cause of the "lack of ease"— restore harmony by taking off the pressure from the nervous system which causes the pain, and that ends his task,

so far as Neuropathy is concerned ; and in Ophthalmology all that he can do is to stop the waste through the eyes of the nerves ending therein, and that ends his responsibility. Nature does the rest.

All disease being traceable to nerve interference, unnaturally, to cure all diseases we are only able to remove the undue pressure and stop the waste, then our work is ended. We need no analysis of urine, or minute differentiation of conditions of organs, for that is out of our line. The only change possible to make is through the removal of the cause of the difficulty, and if the condition is this side of the "limit angle," nature restores ; if not, the time of dissolution will soon show itself, and no remedy known to man will cure that state, or change it for the better. Nature's laws are irrevocable, and death is certain. Food and rest are all that patients need after our duty is done. This is irrevocable. No change will ever occur that will change this philosophy. Its application may be improved, but the same necessity of its application will always exist, and results as now continue.

SOMETHING ABOUT BACTERIA AS A CAUSE OF DISEASE.

Spontaneous generation of bacteria is said to manifest in certain conditions, causing what is called disease. While it is a fact that certain kinds of bacteria are seen when certain diseases are manifest is not denied, yet that they are the cause of said diseases does not follow ; for when the physical condition is one of health, nothing of the kind is present. The presence of said bacteria is only found where there is a perceptible nerve weakness, or where emaciation exists, and generally from exposure and fatigue for some time before any signs of the presence of the symptoms of disease exist, indicating the fact that any such a "*causus belli*" as bugs are involved in the case.

The "prodromes" of most diseases are manifest long enough to prognose abnormality, and these are plainly indicative of nerve exhaustion — a letting down of physical strength — and this is positive evidence of there being no bacteria as yet connected therewith, for in the case of typhoid fever, one neuropathic "adjust-

ment" restores the natural equilibrium, and bacilli are *non est*, for as yet no "nidus" has been formed for their habitation in the "Brunner's glands" nor "Peyer's patches," and the one adjustment absolutely and unquestionably scatters all signs of the lesion in ilium and intestinal tract. We assume that bacteria are innocuous until a "nidus" is formed by effete matter, either from decomposition of congested venous blood, or a chemical change or changes therein, localizing somewhere in the mucous membrane where these microbes may migrate to, and inhabit elements prepared for their habitation compatible with their nature, and then they may assume command of the situation. Every foreign substance is a source of irritation, and this fact alone is antagonistic to the introduction of drugs, or anything, into the system, but the food containing the normal elements.

The coördination of the various parts of the body with each other is sufficient to cause re-established harmony therein, and restore the body to its wonted physical condition. In the treatment and cure of malignant diphtheria, sore throat, and typhoid fevers, puerperal fever and pneumonia, and even cholera, are sufficient proofs of the efficacy of physical treatment.

THE CEREBRO-SPINAL NERVOUS SYSTEMS.

That the human body is composed of nerves, very profusely, the anatomist readily admits. That the nerves perform, or seem to, all the functions performed by the body, is admitted. The how they do it is quite another proposition, and not so easily understood, and not so readily demonstrated. Phrenologists have shown that localities called faculties have the characteristics of development, or non-development, according as they are exercised — used. From this premise we conclude that thought is the prime moving cause of development, and that inasmuch as the body in all its parts is built up by the material sent there in the fluids, and that these fluids go to all parts through channels called arteries, and that all of these are surrounded by muscles, and that these muscles are controlled by nerves ending in them, and that the contractions and relaxations of these muscles result in the rhythmical movements called peristalsis, and that through these movements the fluid is distributed everywhere in the body, it follows that the nervous system is the prominent factor in the body.

ALL DISEASE DUE TO NERVE WASTE.

To the individual who has been a victim of medicine the above assertion seems strange. That all functional disorders change to a normal condition when the waste ceases, nothing is more easily demonstrated, nor is any proposition more reasonable. That the waste can be absolutely arrested is unquestionable; hence a cure of all functional ills is a certainty. It is not anything like the administration of medicines, for that is based largely upon a supposition and the effects are doubtful under the most favorable conditions, for they may injure rather than benefit; whereas, the

method which stops the waste is certain. Which has the greater claim upon the individual who desires to be cured of disease? The assurance of being well is a desideratum worthy of the profoundest consideration from all. This system is correct, for it is susceptible of actual demonstrations as to its certainty.

SOME REASONS WHY STOPPING THE WASTE OF THE NERVES CURES.

The first is, every tissue in the body is said to be under the direct control of nerve influence. No action, sensation or motion of the body can possibly take place without nerve impression. All of the nerves are the media through which the mind is conveyed, and hence essential. The nerves, being essential to the conduction of mental influence, must be in a normal state. The elements of the nerves are the product of the blood, and the blood is the product of the food eaten, the water drank and the air breathed, and these all being manufactured therefrom, it is important that the food be of a character which contains the elements necessary to manufacture the nerve elements fitted for the conduction of (mind) nerve power, to execute the desires of the mind in the superintendence of action, sensation and sympathy throughout the body, so that harmony may at all times exist

The crudity of the knowledge of physical action does not suffice for an excuse for the chronic condition of so many people, for it has no redeeming quality in it. Intelligent comparison shows the better way to be one which has a certainty of analysis and a sure way of arriving at the exact quantity of nerve power; how much is being wasted in a given period, and a most positive method of arresting the loss every second of wakeful hours. That being the cause of sickness — we mean nerve waste — is it not a reasonable proposition that when the waste is arrested, stopped, that disease will also stop — cease to be — provided the proper elements are used as food to rebuild the waste tissue? With this proposition before the reader, does it not seem wise to consider it, and investigate its philosophy, its methods of relief, and if one desires to be restored to health, to practice what seems the most reasonable course to obtain that result?

THE PHILOSOPHY OF PHYSICAL MANIPULATIONS AS A MEANS OF
REMOVAL OF PATHOLOGICAL CONDITIONS REGARDED AS DISEASE.

It has been urged by some that impingement of nerves is due to partial or complete dislocation of bone—vertebra—generally, and that the adjustment of these bones sets in order the whole difficulty; in other words, relieves the suffering, rights the wrong. While it is proper and right to adjust the bones when out of place, it does not follow that all disease is a result of dislocated bone, nor that because there is a pain anywhere does it necessarily follow that a bone or a vertebra is dislocated; neither does it follow that, because a snap or sound is heard when manipulations are made, a luxation has been reduced, or that a bone was replaced, or, in fact, that it was luxated.

The ridiculousness of assuming to set a spine every time it clicks, or makes a noise as of cracking the finger joints, only louder, is a subterfuge to show wisdom superior to others. If there could be such a thing as a luxated vertebra when such an occurrence takes place, the verdict would be legion, for it does not take much of a pressure on a vertebra to make a noise similar to the “cracking” of the finger joints.

There is great reason to seek to know the truth regarding the above state of affairs. That there are certain nerves released along the spine by a “peculiar movement” is a demonstrated fact; but that results follow only when the famous click is heard is in no sense the whole truth; nor does it follow that typhoid fever is cured as the result of the reduction of a luxation; neither is it probable that that occurs when the puerperal state is aborted, for there is no reason to believe that the parturient stage necessarily dislocates the second lumbar vertebra; and yet the fever is relieved when the pressure is removed from the nerves of the spine in the middle lumbar region.

The ignorance of men is sometimes apparent upon the very surface of their theories. A careful, intelligent examination of the person is an essential prerequisite to know what the trouble is, and simply a casual glance along the spine to discover the contour of the spinous processes savors too much of clinical guessing, that all diseases have their origin as a consequence of elevations and depressions of the vertebral column! The practitioner, or the would-be diagnostician, who is ignorant of the nervous system, is frequently led into erroneous conclusions, and "ventures where angels fear to tread," on questionable ground, and assumes unprovable probabilities, rendering an accidental discovery supremely ridiculous, to say the least of it, as is the case of Chiropractic and Osteopathy. While both these discoveries are marvelous, so far as the treatment as well as the results are concerned, yet the claims of the discoverers are founded on hypotheses rather than on real anatomical and physiological facts; and yet this seems arrogant to assume, and would be, but for the known ability of the writer regarding both these so-called philosophies, especially the application of them practically, scientifically. It is a demonstrated fact that the founders of both theories are unlearned men, and have but little understanding of the real facts concerning the fundamental principles of what they accidentally discovered.

That great good, wonderful cures, have been made by the application of both these methods of treatment needs no comment nor denial; but, after years of close scrutiny, a fairly good understanding of anatomy and physiology, and some experience as pathologist, we are inclined to the opinion that exaggeration and over-much enthusiasm have been as great factors in their adoption as could be imagined. When it is known that everything from the earth, air and water has contributed to the armamentarium of all schools of healers, and a medley of contradictory theories advanced in support of each theory, it is not strange that a new claimant for renown should start out with vigor, when there seemed to be on the very surface of its claims a plausibility more reasonable than had been presented before, especially that would meet and satisfy the wants of a large class of those inclined to be somewhat materialistic, and who had often tried effects of medication and medicine systems until hope had almost died within

them, and who in reality had almost given up all hopes of relief. The very idea of something being used that left medicine out of its curriculum of treatment so astonished the people that a mad rush for the new forced a trial of them, as any new thing, wherever adopted, has forced recognition for the time; and thus it has been with these two methods. And while one is a different method of applying the same philosophy from the other, yet the fact remains that when the nervous system is rightly understood, these two methods may be utilized to far greater advantage than any others known, when combined, so far as physical application to the cure of disease is concerned.

The deficiencies of the advocates of the one in practice is apparent, as either theory under its present auspices lacks something; the use of both, properly understood, panoplies the possessor of this knowledge with a double advantage not possessed by the one who only practices one of them. Either, as practiced by both of these schools, at once recognizes the fact that something radically wrong characterizes all his efforts to accomplish all he desires in many cases; that is, he feels the need of them both to render him efficient.

The bunglesome manner in which either, and in fact both, are taught and practiced has been a source of considerable criticism, until we brought about harmony and favorable results, and larger satisfaction from patients, by making out of these two methods a plausible, rational, scientific, systematized method, and began to apply it in the treatment of diseases. And now, as we have evolved an entirely new system, based upon the law of freedom of the nervous system, and named it the *Neuropathic System*, we are ready to demonstrate its superiority over all known methods of healing, treating all known diseases, and positively relieving and curing at least eighty per cent. of all diseases which are pronounced incurable by the general practitioners of all schools. Investigate it.

ACUTE DISEASES ARE AMENABLE TO THIS TREATMENT.

In cases of fever, absolute reliance may be placed in this treatment, properly given. When typhoid fevers succumb at two or three treatments, is it not reasonable that any other fever is as

amenable as it is? It will control fevers so absolutely that patients and their friends will say that the cases did not have the typhoid at all; but you may convince any one by taking a genuine case, which has stood fire for two weeks, and the temperature has run from 100° to 106°, and you will be astonished when you see the temperature go down to a normal condition within a day or two of the right sort of neuropathic treatment at fourth to the eighth dorsal vertebra once a day. It takes about a second or two to give the treatment, and one treatment does more good than all the medicine in all the drug stores on earth.

One of my students in Ohio, Dr. J. L. Shilts, will testify as to success in treating typhoid. Those interested may receive a statement from him. His address is Verona, Ohio.

This is so much better than Osteopathic treatment that there is no comparison, but there are so many who are opinionated in the idea that there is nothing comparable with Osteopathy that we are glad to prove to them that all is not known by one man, nor is one system of treatment all there is in this world. Whilst we have been fifty years studying and applying many systems, we find that no one contains all that one should know to be effectual in alleviating the wants, yea, the necessities, of humanity.

The following is a quotation from Dr. J. L. Shilts, Verona, Ohio:

“As to typhoid fever, Neuropathy is a knocker. In my earlier studies of this subject, and before I had put this philosophy to the test, I had a case of typhoid fever. It being a typical case, I used only medicine for ten days, and her temperature ran about one thing all the time, with patient getting weaker; so I thought to myself one day, as I was driving along going to see the case, I decided to try Neuropathy on her, and just go right on using the medicine. I had known that Chiropractors claimed great things for typhoid, but I could not get up enough courage to try it alone; so, when the thought came to try it with medicine, I said I will do that to-day. So I did, the temperature being about the same as it had been for ten days. I gave her a treatment and left the medicine as usual, only symptoms showing for the worse; but I returned the next day, and found the patient looking

brighter; gave her another treatment, continuing medicine, and returned next day and found the temperature, which had been running to $102\frac{1}{2}^{\circ}$ to 103° , down to 100° ; patient otherwise much brighter and improved every way. Continued medicine and spinal treatment. On the thirteenth day found temperature up to 101° , owing to nurse overfeeding her, causing pains in the stomach; but I gave her another spinal treatment, and the fourteenth day found temperature normal, patient bright and cheerful, convalescing nicely, only complaining that they were starving her. Not many thought she would live.

“CASE SECOND.—A case of typhoid fever in rather a severe form, which patient was trying to wear out without medicine or a physician. I confess my weakness of faith, and used medicine only the first three days, when, as the medicine was not making any headway or improvement in the conditions, or reducing the fever, I concluded to combine the spinal treatment. I made only eight visits in all, and dismissed it convalescent. So radical was the change and so short the illness, the duration of the fever, that my diagnosis was questioned.

“CASE THIRD.—I don't know what it was, but the fellow complained for about a week of being tired, weak, and feeling badly, and finally he sent for me. When I got the history and found that he had a temperature of 101° , I began with medicine. one drop of nux vomica in half a glass of water; ordered a teaspoonful taken every hour; gave him a spinal treatment; went back the next day; found patient sitting up; temperature normal and all unfavorable symptoms gone, and patient feeling well.

“Of course three swallows do not make a summer, but the results were so radical and so effective I could not but feel highly pleased with them. I could relate many more instances, but these are sufficient to prove my claim that typhoid succumbs to spinal treatment at once, and satisfactorily to patient and operator.

“Disease is the effect of some part of the body being disarranged. As one writer said, ‘Every symptomatic indication of disease is an effect, and every effect must have a cause.’ Such diseases as paralysis, rheumatism, neuralgia, asthma, and diseases

of the stomach, liver and kidneys, and those of females, are but effects of the impingement or pressure upon nerve filaments, ending in the parts involved, of the nervous system in any part of the body.

“ But, says the Bacteriologist, what about the bacteria microbe? We simply say that we attend to our own business, and let nature attend to hers. In a word, we take off the strain, stop the leakage, take off the pressure, and let nature do the rest; for the tendency of nature is repair. If nature has a clear, open field to maneuver, she unchains her phagocytes, and the microbes are at once invaded and destroyed, and they are carried off the field as dead, effete matter, ‘harmless as the cooing dove,’ and the leucocytes come along and clear up the wreck, repair the wrong, and furnish what is needed to restore lost harmony. None can improve on nature in her works. Let this be emphatically impressed upon the mind of the reader, that man cures nothing. He can only remove causes, take off pressure, stop the strain of the nervous system; harmony being thus restored, nature is satisfied; she rights the wrongs.

“ From the foregoing we have tried to show that pressure is the main cause of inharmony and disease, and that the remedy lies in the removal of these causes, and nature heals. Knowing the proper method of taking off the pressure, and knowing where the fault is, it takes but a moment to properly adjust the parts, so as to free the nerve pressure, and disease vanishes like frost before a warm summer’s sunshine. Nature needs no medicines to assist her in performing her task. All she demands is to do her own work in her own way.

“ In conclusion, we would say that the skilled Neuropractor is able, by passing his skilled fingers along the spine, to find the difficulty — find the impingement causing the difficulty, where the nerves are impinged — and the indications are at once apparent. Does this not appeal to your judgment as being sound and rational philosophy? Yours respectfully.

“ J. L. SHILTS, M.D.”

The above is from the pen of Dr. J. L. Shilts, Verona, Ohio, and will speak for the praise of Neuropathy in his own language.

After taking a course of instructions under the author's own teaching, after passing the curriculum of the schools, and having eighteen years' experience in the practice of medicine, he unhesitatingly accords to this system, in his own language, a high place in the remedial system of practice.

The glory of any method rests in its own efficacy, rightly applied; and this, above all others, takes precedence in the manipulatory field of science as the quickest, easiest to apply, most effectual, and therefore the most satisfactory of all the sciences ever known by man. That Osteopathy is eminently praiseworthy, and Ophthalmology fills a niche that this nor no other science does, is conceded; but the grandest, speediest results are due to Neuropathy we readily concede; but when all these are at the command of those who are posted in the teachings of this book, and who know the efficacy of the combined science, there need be no failure in meeting the demands of any functional derangement in any one or all the ills of humanity.

NO MEDICINE EQUAL TO NUEROPATHY IN TYPHOID FEVERS.

The experience of Dr. J. L. Shilts (a physician of eighteen years' practice), who had been through the curriculum of the various schools of medicine, is sufficiently gratifying, as well as convincing to satisfy the most prejudiced objector that something may be done by proper spinal adjustment. After a siege of ten days, with an intelligent use of medication to no benefit, and symptoms growing more grave, and when friends had predicted an unfavorable ending of the case, and almost that conclusion of the physician had been reached, the desire to succeed in ameliorating conditions of his fast sinking victim, applied Neuropathy, when, lo! one treatment started the hope of his patient's recovery into channels which were manifest at once; the symptoms all changed for the better, the fever abated, and cheer in place of gloom took possession of all concerned, and from that day the patient's convalescence dated, and all things terminated in a blissful ending, in a complete victory, within a few days. This needs no comment.

"CALORIFIC NERVES."

Any adept in anatomy, physiology and chemistry, looking at things as they are, must be dull of comprehension to conclude that physical structure produces physical force. That such a thing as a "calorific" exists, must have combustion behind it, in it, or be composed of chemical material which, under proper conditions, result in caloric.

As all heat is due to friction or chemical action, it is untenable to suppose that there are "calorific nerves," for the nerves in no sense act, nor are they anything else than conductors of thought, not generators; not possessing heat properties in and of themselves, and are alike heated when the tissue through which they pass is heated, no sane reasoner would concede to them heat properties, nor heat conductors, for all things which convey heat become hot themselves. The attempt to found a philosophy upon the ignorant *ipse dixit* of any set of individuals is simply preposterously absurd. If there were such a thing as a thermal or heat nerve system, it would vary the temperature of the body all the time in the ratio of excitement, and the body would never have a normal temperature, for there could be no average to constitute a standard. The heat of the body is due to chemical, bi-chemical, action, a resultant of heat and cold and chemical decomposition and friction of the molecules of debris, and in the constant metabolic changes in constant activity, resultant from the varied supply and waste going on at all times in the body everywhere.

We are not assuming to be dictatorial as to how men shall think, nor are we inclined to criticise men's opinions, only in so far as they antagonize great truths, which are demonstrable in every instance. We can not see any use of advocating a supposed theory to be odd.

When there is so much proof to demonstrate a great philosophy, it seems to me that just as simple a manner as possible, and free from all ambiguity, is the better way to explain a principle. We know that, in the disorders called disease, to which humanity is addicted, when we have pain in the abdominal viscera, the pneumogastric nervous system is irritated, or that, in consequence

of lessened action of the splanchnics, excessive action devolves upon the former; but that when the "peculiar" adjustment in and along the spine unites the two forces, instantaneous changes take place and harmony is re-established — the pain ceases. The one or the other set of nerves, acting excessively from any cause, may be united by the same adjustment, and the whole mystery is solved, and all circumlocution is superfluous, and the metabolism of excess, producing fever or the reverse, is neutralized.

This is the whole secret of the philosophy of what is called Chiropractic adjustment. It need not cost any one \$500 nor nine months' study on a lot of decomposed human bones to know how to alleviate suffering humanity, if he will study the nervous system properly.

THE MAGNITUDE OF NEURO-OPHTHALMOLOGY.

THE ASSURANCE OF BENEFIT FROM NEUROPATHIC TREATMENT.

Inasmuch as all diseases are due to too much acid or alkaline elements in the body, and that the excess of one and the deficiency of the other is due to over or deficient action of the one or the other of the nervous systems involved, it makes a difference in whether one is treated or not for the weal or woe of the patient, for the proper spinal treatment is always beneficial where there is any abnormal condition whatever, and no harm can come of the treatment, whether there is anything the matter or not. It is not a harmful thing in any event, and always does good when the forces are unbalanced. There is this advantage: when in doubt as to whether there is anything the matter, that the treatment will keep the two forces balanced, and no disease can take hold whilst this condition exists.

There is no necessity of being sick with any chronic affection if the spine is properly adjusted daily, semi-weekly, or semi-occasionally, and is a better prophylactic than all else, or all supposed medical prophylactics, and is attended with no possible harmful result.

THE HUMAN STOMACH.

THE RECEPTACLE OF ALL THINGS, FOUL, LOATHSOME, INCONSISTENT
AND INCOMPATIBLE, THAT THE HUMAN MIND CAN IMAGINE!

It has been said that the eye suffers more abuse, with less complaint, than any other organ in the body, but when we consider the stomach, it seems questionable.

Every foul, filthy, nasty, bitter, sour, sweet, pleasant, as well as disagreeable thing that could be thought of has been directed to that organ, and it is supposed to be the dumping-ground of everything in the shape of food, from the raw material to the well cooked, and all grades of ignorance of the method of cooking and careless kitchen maids could throw together and call it "victuals," could concoct, devise or invent; and then, not satisfied with these, medical men have made it the road to the remotest intimation of a possibility of reaching a pain or a disease, and dumped his filthy poisons into it, with full assurance that, through some mysterious pathway therefrom, the efficacy of his supposed remedy would find lodgment in the citadel where the disturbance seemed to find lodgment, and by some unknowable process lay hands upon the fiend who, forsooth, would deign to seek a lodgment in the body and cause inharmony therein.

That medicamentum failing, resort is had to some other nostrum, and the stomach has to bear the brunt, and if it complains, the medicine man casts a frowning look askance his armamentarium of poisons, and snatches a remedy and hurls it into the stomach, to make believe that it will right the wrong, and then another kind is thrust therein, that it may do general "toning up"; and so on, day after day, and in many cases year after year, the stomach becomes and is the receptacle of every foul, and mean, and loathsome, and poisonous substance that the multiplied kalei-

doscopie imagination of ignorant suggestion can conceive; and it has it all to bear, and then if it complains, it is "dieted" for the very things it suffers at the hands of ignorance, fools and doctors! Strange people in this world! If there could be even the least possible amount of the commonest commodity of common sense utilized along this line, almost every one living would derive benefit therefrom.

It is said of some people that "their god" is their "appetite," their "stomach," and it would seem so,—and their only god, for they are constantly sacrificing at its shrine all the time. Overtaxing the digestive organs and lack of deep breathing cause a large per cent. of the invalidism of humanity. Overtaxed nerves are here manifest all the time in most people. The only natural thing to do is to refuse admission into the stomach of everything which in any way overtaxes the nerve power, which nature placed there to manufacture the secretions which perform the functions of digestion; and be sure that you give the nervous system time to perform its functions there before you direct nerve power somewhere else in the body. Everything that it takes to constitute the physical body is provided therein for perpetuity of life, so far as elements are concerned, and the taste determines what is demanded to keep these elements renewed, and these elements are in the food eaten, and will certainly be sufficient to satisfy any normal demand when our mentality is properly exercised in respect to nature's unerring demands and properly heeded.

Overtaxed nerves ending in the stomach become incapable of rightly performing their functions, same as anywhere else, and the same law governing them must be observed if we would be immune from disease. We simply sin when we pervert nature's laws, and the penalty follows as surely as day and night succeed each other. The importance of this proposition can not be too strongly emphasized, for violations of this law cause all of the sufferings of humanity. The care of the nervous system embraces every known obligation upon which health depends. "If any man destroys the temple of God, him will God destroy," is a divine law which pertains to this life in its effects; but it reaches farther than this, for the destruction of this body, "made in the

image of God," makes the destroyer a murderer; and it is added in the same law that "there shall be no satisfaction for the man who murders his fellow man."

It becomes necessary to get back to the law which governs our physical being to be immune from disease, as well as for the sinner to come under the purview of the divine and spiritual law, to be free from, and continue free from, sin in a Scriptural way; hence, "No man liveth unto himself." He can not in any sense!

The law under which we live, physically, is immutable; dispute it who may, it is true. It makes no difference as to what your opinion may be, that does not change the facts. That being the case, and we knowing these things to be unknown and unheeded by even many who claim to be healers, we are the more specific in our delineations of the facts involved. The profundity of assuming to be a teacher in the healing art is sublimely significant, and we put forth what we have to say with due regard to the consequences involved, and want the reader to consider all we have said in the light of absolute confidence in all that we claim to be worthy of consideration, for we mean what we say, and believe all to be true.

INTERNAL BATH — HOT WATER INJECTIONS.

The inestimable value of the internal ablutions of warm and hot water as can be borne is an essential, unsurpassed in many conditions of intestinal and bowel troubles, and nothing known can be substituted for it. It is done by the use of a fountain syringe, with long and substantial rubber tube, sufficiently long to reach from the bag, suspended on a nail six or seven feet high, to where the body can be reached comfortably. Fill the syringe with the water to be used, and let the patient lie on his right side, with knees flexed on thighs; anoint the nozzle of tube with vaseline or oil and pass it into the bowel, first being filled with the water, so as to avoid air being introduced into the bowel, letting the water force the way open for the tube, and especially if the bowel is sore, following up by gentle pressure until the tube is well in.

For assurance of getting enough water in the bowels, let it enter slowly, pressing on tube occasionally to arrest the flow, so

as to arrest the shock and tendency to desire to pass it out, and then let it run again, filling the bowel as full as can comfortably be borne before letting it pass from the bowels. To facilitate the filling of the colon, and even the small intestines, in case of intussusception, insert a nozzle to the syringe tube as much as twelve or fifteen inches in length, and it should be somewhat flexible; let this tube pass up its full length, and then let the water pass into the bowel, from a half to one gallon, letting it remain in the bowels a few moments before passing it out, and the whole contents of the colon will pass out. This is an excellent means of relieving impaction of the bowels.

It is an absolute cure for intussusception if applied in time, and should always be used at any stage, for the almost certainty of saving the life of the patient should never leave a possibility unused. In appendicitis it is a sovereign remedy, and with proper manipulations and lumbar adjustment, almost every case may be cured in a few hours, or even moments. There is no better remedy for flux and diarrhœa when the injections are resorted to and repeated at one sitting, two or three times, and repeated as often as once or twice a day. For colic it acts like a charm, relieving at once. Do not be afraid of this means of relief. For every condition where the bowels are inflamed, or painful from any sort of accumulation, this furnishes the easiest and speediest means of relief possible. It is an absolute panacea for such conditions as above mentioned, and no one should fail to be prepared for it.

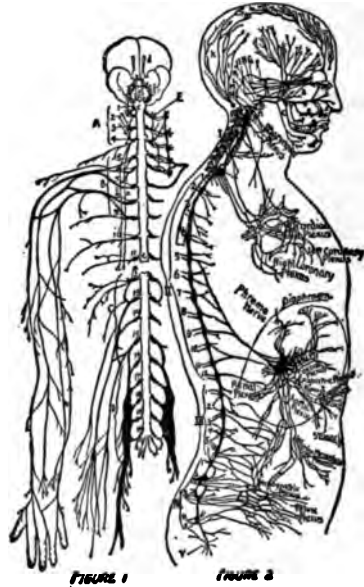
AN EFFECTUAL WAY TO TREAT SORE THROAT.

Have patient seated on a chair or reclining on a couch, head leaning back; insert the forefinger into the mouth, palm of finger upward and extended to either edge of the soft palate; begin pressure at edge of soft palate, and while continuing the pressure pass finger across the upper jaw on soft palate to opposite side, and then return finger, with the pressure, to opposite, or the side where begun. This relieves the congestion and starts the flow of pent-up venous blood, and relief is at once experienced. Repeat once a day till cured.

The Chiropractic cervical adjustment in upper area on side of cervix is not to be neglected when indicated by drawn, deep, muscular rigidity.

The above treatment surpasses all gargles and stupes and local applications in diphtheria, scarlet fever, malignant sore throat and enlarged tonsils that were ever used.

The one who fully comprehends the philosophy of this treatment will need no medicine, but simply use the brain and direct the fingers and hands how to remove the pressure.



THE SYMPATHETIC NERVOUS SYSTEM.

This cut represents the nervous system, and shows its importance at a glance. Through the sympathetic nervous system we have communication to every part of the body, and every function influenced and controlled thereby, hence the importance of keeping it free — all strain and pressure from it, in all and every part of it, to be healthy — natural.

DIRECTIONS FOR FINDING NERVE ORIGIN AND ENDING.

Those who are not familiar with the nervous system—its anatomy—may form a very good idea of it by examining the plates and tracing the nerves from where they leave the spine to where they end in the tissue or muscular structure.

Wherever the nerves end is where they express themselves, and to be successful in curing disease one should have some idea of the nervous system, so as to know where to apply treatment to get effects as desired. This instruction followed out carefully will save the student much study—of anatomy in the books—for here may be seen the very thing one wants to know. To make the mind perfectly familiar with the subject, anatomy may be consulted and studied at leisure, which is a very profitable thing to do anyway. The more familiar one is with the knowledge of the human system, the better is he prepared to successfully apply this science. It is important to be acquainted with the business we follow and to know why we do a thing as well as how it should be done, and then we have more confidence in our ability to do what ought to be done, and when it is done, so we may not overdo but to know when to quit a thing when it is done.

SPHINCTER MUSCLES.

Sphincter muscles are those encircling a tube or an orifice. They act in such a way as to constrict, close or lessen the caliber or lumen of a tube or cavity, and their function is suited to each particular vessel in which they are placed, accomplishing their several functions according to the several necessities involved. They are involved in closing the outlets of the body, as a rule, or to narrow or widen internal structures. They are found in the eyes, the eustachian tubes, in the throat, at both ends of the stomach, at the celiac orifice, at the pylorus, at the sigmoid flexure, at the anus, os uteri, urethra and bladder, and manifest in the peristalsis of the intestinal canal.

These muscles are wholly under the influence of what the physiologist denominates nerves. Wherever any action takes place in the body, it is the result of nerve influence ending in the part, whether that be in the deep structure of the muscle, at its surface or at its ending. Irritation of the nerves ending in a sphincter, or any other muscle, is a cause of action. If on the irritation of nerves ending in sphincter muscles, contraction of them takes place, for muscular structure has but one function, that of contraction, the lumen of the vessel or orifice is lessened thereby. If irritation takes place in the nerves ending in the ciliary muscles, contraction of the pupil takes place; and if the contraction continues, a condition we denominate pressure occurs, and we have a condition commonly understood by Ophthalmologists called strain, or nerve waste. The constant effort to contract the *musculus iridis* causes exhaustion of nerve power in time, and results in any functional disorder known as disease. If the nerves ending in the uterus are long irritated, there will be as a result interference of the function of that organ. If irritation of the nervous system ending in the sphincter muscles of the rectum and anus takes

place, over a normal state, rectal diseases are the result — piles, constipation, and many abnormal conditions are the result. An unnatural pressure upon nerves ending anywhere in the body produces abnormal conditions, and if unduly continued, disease or functional disturbance results.

The discovery that nerve irritation on terminal nerve fibers cause disease, I believe that Professor E. H. Pratt, the Orificial Surgeon of Chicago, Illinois, is entitled to the honor of the discovery. But we are of opinion that his use of that discovery was in many instances illy directed, and fraught with much harm, especially the removal of end filaments themselves, in preference to removing the pressure elsewhere, which caused the irritation, and the evils following. The intense desire for glory knows no bounds, as a rule, and the knife, sword, and leaden ball often become the instruments through which it is attempted to be attained. In this case many a victim has been prematurely ushered into the unknown future under the knife and the anesthetic, whose life might have been spared for many years had the means of removing the pressure been known and used. The gory hands, in human blood, have marked the epochs of the centuries, and animal and human victims have been sacrificed to gratify the ambitions of seekers for fame, though honest incentives may have prompted the sacrifice.

We live at a time when such gory sights are no longer necessary, for the discovery of causes of human ills being found in the nervous system, and the means of removal of the causes being also discovered, relief may be afforded with as much certainty as that day follows night, when the rational, correct means are intelligently applied.

The spinal curvatures seen everywhere are direct results of nervous irritation, resulting in contraction of muscular fibers, and a gradual curve a consequence. To relieve that condition, "take off the pressure" is all that is needed. To relieve the victim of amenorrhœa or dysmenorrhœa, we simply remove the pressure from the nervous system ending in the organs involved. The same law holds good for any other functional disorder known to humanity, or to the doctors.

The terminal nerve filaments in some organs set up a condition therein which, through what is termed "reflex action," is manifest elsewhere in the body; instance, St. Vitus dance, chorea, asthma, and other nervous affections. The sphincters of the rectum are a source of much trouble in many instances. A tightened contraction of the muscles pertaining to that part of the body produce the results manifest in the above named disorders, and in many other conditions, such as capillary congestion, cold feet, spasmodic respirations, holding the breath of children, hysteria of females (and males, for that matter, for some males have that condition). An instrument known as "Pratt's Bivalve," properly used, is an almost certain restorer of spasmodic conditions of the nervous system, capillary congestion and hysteria, asthma and many similar affections, and it acts favorably at once, when properly used when indicated.

HOW TO USE THE BIVALVE.

The physician should provide himself with at least three sizes of the bivalves, for the various sizes are necessary to meet the demands of the various sized patients. One for adults, one for youths, and one for children will always be necessary to meet the various clientele one is likely to need to use.

To use it properly, let the instrument be well oiled, then gently introduced into the rectum, pointing in a direct line to the umbilicus, pressing the instrument squarely and firmly until it has entered the rectum well inside of the internal sphincter muscle, being particular to have the handle pointing directly backward from the patient, so as not to bruise the prostate gland in males; lying on the left side, if possible, for that is the most convenient position; and now make a few turns of the screw which controls the valves, so as to open it about a quarter to half an inch, letting it remain in that condition, surely spread that much, for if that is not observed, pinching of the mucous membrane of the rectum may ensue, as the instrument is now opened and closed; but if the jaws can only approach to the set-screw point, there will be no danger of any pinching to mucous membrane. With all these pre-

backward toward the coccyx, letting the finger be to one side of that point. This improviso may obviate much delay and much suffering. If necessary, use this measure.

FURTHER BENEFITS OF THE USE OF THE BIVALVE.

It comes in excellent service in asthmatic breathing; in fact, it cures many cases simply by divulsing the sphincter muscles of the rectum pretty thoroughly every day, giving a slight divulsion at first, then in a moment or two a little stronger one, and so on till the constrictions of the sphincters are somewhat relaxed at each sitting. The results are simply astonishing.

In case of hysteria, divulsing the sphincter ani is the most certain of any remedy known. It flushes the capillary system at once, and relief is almost instantaneous. It should always be used with care and judgment, gently, firmly, and with due regard to conditions. It is not necessary to tear the sphincters nor to cause unnecessary pain, and the use of this instrument will not, in the hands of those who have common sense and due regard for the feelings of his patient.

In flux, even a bloody flux, the use of the bivalve, stretching the sphincters pretty freely, followed up by enemas of as hot water as can be borne afterward, flushing the bowels two or three times, following this with rest in a recumbent posture for some time, will be the best remedy for flux known. Repeated flushings of very warm water should be made, say every four to six hours, until patient is well; and the treatment in the lumbar area should be made if indicated, and will be beneficial anyway, for it unites the forces and tends to harmony every way.

The above instructions are worth everything to the afflicted, for they are effectual.

THE CHIROPRACTIC METHOD OF NEURO- PATHY AND OPHTHALMOLOGY COMBINED.

The word Chiropractic practice is simply hand practice of a peculiar character to relieve nerve pressure from the spinal nerves. Having taken full courses of instruction in Chiropractic science, and having six years' experience in its application, and having evolved from the Chiropractic the Osteopathic and Ophthalmic sciences a system we name Neuropathy, we hesitate not to state that our system of practice embraces all there is known in Chiropractic science as taught by its originator, and all there is in Osteopathy, and all there is taught in Ophthalmology, taking in all the nervous system of head and eyes, and spinal nervous system, making a complete science, which, when properly applied, cures all forms of human ills, straightens spinal curvature, cross eyes, cures headache, fits, piles, deafness, all eye troubles curable by any science; female ills of every form and variety, and all functional disorders, called diseases, of every name and nature, by adjustment of the system with itself, taking off the strain and pressure from the nervous system, the cause of all these conditions called disease.

The spinal nervous system is distributed to the various parts of the body, and through them all action, sensation, and sympathy are manifest, and a larger per cent. of our ailments are due to disturbances of these nerves, either by pressure upon or overuse of them, and it naturally follow that, in order to cure disease, we must take off the pressure and stop the irritation and waste, which is constantly going on as a result of the pressure, or overuse. We actually do this with our hands, hence the science has received the

name Chiropractic, or hand practice. The whole body is treated for any and all complaints through the spinal nervous system, and when the impingement, the pressure, the irritation, is removed from all the nervous system involved, we have a natural condition restored, which is nature's own normal state, harmony is re-established and disease vanishes, and nature asserts herself and the body becomes clothed in its right habiliment, health. This is the true state of the case in our philosophy, and the experience of a number of years of actual experiments and application of this principle in the treatment of the various diseases of the afflicted has amply verified its absolute certainty of results, and its application and truths.

THE SPINAL NERVOUS SYSTEM.

At the various openings along the spinal column, on either side of it, we have leashes of filaments of vessels and nerves, which are distributed to the various parts of the body. These, with the nerves which pass down the front and sides of the neck to the cavities of the body, the viscera, control the functions of the various parts of the body in which they end. This being an indisputable fact, we assume, and show by actual demonstration of results from our treatment, that diseases cease when the pressure upon these nerve filaments is off; and that our methods are the proper ways to take off that pressure is shown by results. No disease exists anywhere in the body unless there is interference of the nerves ending in the parts diseased. When we remove this pressure, as sure as night follows day disease is driven therefrom, and the patient walks forth clothed in his right mind and health.

THE NERVE STRAIN IS CAUSED BY OVERUSE.

Whatever set of nerve filaments have been taxed with more work than nature manifests itself in a deficiency of the parts in which the said nerves end, or through a general breaking down of the part itself or the whole body, through sympathy. Therefore, to cure such a condition, reason would say, take off the strain and let nature cure.



THE FORCE OF HABIT.

It will be seen all the way through this course of teaching that we use some terms as are commonly related to things which have been said by so many without a due regard to the facts as they are. For instance, we sometimes say "nerve force; the nerves control the various parts of the body," when, in fact, we do not mean to convey any such an idea. There is no such a thing as "nerve force," nor do the nerves in any sense "control the body," for the nerves are simply as much a tissue as the parts in which they are distributed; and we might with the same propriety say the tissue controls the nerves.

The truth of the matter is, mind controls the body everywhere, at all times, during the life of the body. It is the power, the controller, the nerves being only the media through which the mind is conveyed, as electricity is conveyed through the telegraph wires. The power is manifest in the parts where the nerves end, and there only. All chemical changes take place where nerves end anywhere and everywhere throughout the body, and when the media, the nerve filaments, are in a normal condition, harmony throughout every part of the body maintains. The overuse, or the interference of the nerves renders them incapable of transmission of the power, the thought, the mind, which superintends every act and change possible to imagine in the entire body, the circulation of all the fluids in all the various channels, glands, bone, skin, or any and all other parts, and sees to it that supply is manufactured into the elements necessary to maintain the proper proportion of the elements essential to keep up and maintain all the proportions of each element necessary to keep in harmony with itself, as well as every part of itself, duly supplied with the materials of which the body is made up, so that no lack or oversupply shall be present to disturb the equilibrium of any department. The main-

tenance of this state is certainly one which nature is constantly struggling to maintain all the time, but we pervert that design at almost every turn we make, and cause confusion, inharmony, which we denominate disease. Disease results from violated law, sin.

SPECIAL OUTLINE OF MIND INFLUENCE THROUGH THE NERVOUS SYSTEM.

Whether we shall ever know the full meaning of what is called nerve influence or not, we are well satisfied that mind performs every function performed in the body through the nervous system, and are well established in the belief that this is the only way a systematic explanation of the phenomena of waste and repair can be explained so as to be comprehended. If mind does not control this body, then it runs without control, and no one is ready to admit that its uniformity of shape, size, weight, and temperature could remain so uniform, with its forty-two faculties, without a mind behind it to govern it.

That mind controls, superintends and directs every molecule in the body may be believed, when a simple movement of any part of the body is at once recognized, shows its absolute certainty. It is not a machine, governed from (by) some outside force, but the force or forces pervade every department, and so arranges every molecule in this marvelous structure that when no unnatural obstacle interferes, harmony prevails in every department.

That a perfect method of superintendence prevails is further shown in the several departments in the manufacture of the secretions of the body through the nervous system ending in the various glands, for each gland secretes its own kind for a specified purpose, and that its function is limited to specific localities and for special purposes, is known. That the stimulation of certain end filaments along the spine results in specific effects is an exemplification of mental influence, for the results are uniform, and not haphazard. Each of the forty-two faculties in the calvarium perform specific functions, and their combinations represent varied functions. These functions are manifested according to the strength of each faculty involved, and in direct proportion as

their strength invariably, and according as the necessity demands, hence the expression of mentality through them. An interference of the molecules in the media changes results in the expression of mind. This shows a necessity of absolute non-interference when normality is to be the result. Any one faculty or its channels of communication overused depletes functional power.

THE INFLUENCE OF SUGGESTION.

Whatever may be thought about the influence suggestion has over the affairs of this life, it is evident that through the suggestions we receive from others we act, and the faculties seem to have been so arranged that certain suggestions start an influence that culminates in the fulfillment of the thing suggested, and that our environments seem to force attention, and we become to a degree conformable thereto; and if certain functions are more deeply impressed,—that is, the influence, the suggestion, if more intense,—we find ourselves yielding and inclining to pay more heed to that than perhaps a thousand influences which are of a much greater importance to others present. These are every-day occurrences, and show that all influences to be attractive to any one, the individual interest must be subserved to a great degree, and this proves the strength of faculties and their association with the things of life; so that suggestion, to be effectual, there must be a degree of receptivity on the part of the suggested, and then a natural willingness to accept as true the things suggested.

When the consent of the party is fully, and the will power is completely, relinquished to the suggester, and the mind becomes wholly absorbed in the desire to do what is suggested, the rest of the faculties, however strong they may be in another direction, relinquish their interest, and soon the will power of the one becomes the will of the other, and the two act in harmony; and so long as this state is kept up the suggester has the other one under control. The willingness on the part of one person to yield his thoughts to the other one constitutes the whole preparation to become hypnotized or swayed by the suggester. Any reservation or relinquishment on the part of either party of these conditions

aborts the results that would otherwise be, when the one becomes absolutely negative and the other remains positive. Whatever is the desire of the one becomes that of the other, and there is corresponding reciprocity of action. The suggestions then become influences which affect the whole person.

The remarkableness of this condition is the interesting part of it. The mind being the controlling influence of the body, when it fully takes possession the body loses all consciousness of feeling, only as suggested by the one to whom the hypnotized has yielded consent to be controlled, and he will perform any act in the bounds of possibility suggested to him by his control. Diseases of all kinds seem to be influenced by the suggestions, and if repeated often enough so as to become fixed and a part of the life thought of the individual, the results will be as desired by the suggester, so that diseases seem to resolve themselves into a mental ideality, which may be eliminated by intense thought in the direction indicating such a desideratum. Many diseases have been permanently dispelled by this means, and surgical operations performed without anesthesia of any other character (proving that the will power thoroughly controls feeling when intense enough).

In treating any condition or disease of the patient, repeat in the way of suggestion several times to your patient that they will not have that disease any more; say to them that they will wake up from the disease; they will be well; that they will not have any more pain after they shall have awakened up. The impression to make on the mind of your patient is that your promises will surely be verified; they are going to be as free from their ailments as if they never had them; they will be perfectly well. This state of mentality is the thing to secure, and can be done by a repetition over and over to, and in the presence of, the afflicted, which molds the idea in his mind, and the thought does the work; for remember that as a man thinketh in his heart, so is he invariably, but he must be sure he thinks the thing you want him to think, and then he will be as he thinks. Thus you understand that it is essential to have the fullest confidence of your subject.

The honest and strong mental concentration of the operator should be directed specifically to his work, and he should always

remember that the mind of his subject is to be exclusively centered upon what he says, and there should be no hypocrisy on either side. The seriousness which should inhere in this matter is too often overlooked, especially in the treatment of diseases, for the patient comes to you with an earnest desire to be cured, and should not be trifled with, nor the confidence reposed in you betrayed on any account. I am seriously in earnest in this instruction, and would discourage any maligning or false assertions. There is a power in this science which surpasses human comprehension, and can be positively used for good or harm, for you get the consent of your subject to submit to what you suggest, and he does it, if honest, and if he shams he can soon be detected; and so there should be earnest, honest confiding in each other, and strict integrity on the part of subject and operator, and the greatest possible good may be expected in the treatment.

THE HOW IT IS DONE.

Have the patient seated in a chair, both feet resting on the floor, body in as easy a position as possible, with whole body as nearly relaxed as possible, and mind off of any strain or thought of what is being done, or thinking what is going to be done; then remain quiet, and both eyes either closed or steadily gazing at the floor or some object, with the mind fixed on nothing but the thing looked at, and with a determination to give his whole thought to the business intended; that is, becoming relaxed as nearly as possible, willing his own actions and thoughts conform to every suggestion made by the operator, and take all the suggestions as if they were actually so, with full assurance that everything said will be as stated. This state of mind should be insisted upon before the attempt is made to a yielding to the suggestion, and then the mind is half converted into the hypnotic stage. Then have patient close the eyes tightly, and urged to close them as tightly as he can, and keep up the suggestion to close them tighter, and that they will be so he can not open them — they will be so tightly closed he can not possibly open them — intensifying the words, and at the same time accompany the words with a stroking

of the hands downwards over the eyes, and say, "Now you can not open the eyes, you can not, you can not open them; try, try ever so hard, you can not open them"; and if he does seemingly open them, snap the fingers and say, "Now you can."

If patient was really under your influence, you can test him by standing him with his back toward you, having him close his eyes, and say to him, "Stand erect, head up; and now relax yourself and you will gradually fall backward," putting your fingers near the back of the head, and repeat, "You are falling backward, falling, falling," and at the same time catch him if he does, so as not to let him fall. You may try him the same way standing in front of him. Then try any other simple thing with him, such as fastening his hands together, closing his fists, turning his hands around one another, and stiffening an arm or a leg by suggesting firmly that the arm is rigid, rigid, rigid; you are not able to bend it; you can not bend it, you can not bend it; and the same way with his lower limbs. Intention on the part of the operator, unswerving determination, with a reticence and relaxation of the subject, makes a success of effect. Any and all suggestions are more effectual when made thus. No half-hearted doubtfulness will do. A firm and decided manner must be assumed and perfect submission on the part of the subject enjoined, and when you desire to wake subject, snap the fingers together and at the same time say, "Wake up, wake up; now you are wide awake."

There are many books from responsible authors on this subject, and if the reader desires to get the best, most concise, Dr. Pitzer's is what will amply fill the requirement. This department should be well studied and learned to be useful to the healer.

The different manner by different schools and persons to produce hypnosis does not differ in the main features, so far as producing hypnosis is concerned, for all must, to be effectual, first get the consent of the subject, and be positive in suggestions to accomplish what is aimed at, the sub-conscious action, or agreement of the conscious mind to submit to what is suggested, and when that is the case, and the suggestion is persistently intensified, the effects desired may be confidently expected. The seances need not be over a half hour, nor be repeated oftener than once a day,

except for specific results where essential ; but when the subject is once *en rapport* with the suggester, simply a command will be enough to secure subjection at once, and whatever is commanded will be complied with readily without difficulty, and as long as desirable, even for days and weeks, and the subject is absolutely controlled.

MIND CONTROLS THE BODY.

The writers on suggestion are wont to claim a conscious and a sub-conscious mind in the body. That is a conscious mind, the one that takes cognizance of what is going on, and is manifest through the five senses, and has control over things which are recognized by the senses ; instance, seeing, hearing, smelling, and tasting ; that the conscious man confines itself to the nerves of sense, and the actions of the human being, voluntary muscles, and the things which are perceivable. The sub-conscious mind, they claim, has no sense, and does not reason, does not act only as it is suggested to, and yet it controls the body in so far as the vital forces are concerned, superintends the building up and repair of the body, and controls the every-day life of all that pertains to the forces of the body. This sub-conscious man, mind or force is a sort of retired force, and unconscious of anything that is going on in the body, and yet superintends every thought and action. Strange idea !

We assume that these divisions are hypothetical and wholly imaginary, and that mind, simply mind, controls the body, and that it is always conscious of everything that is going on in every part of the body, and that the nervous system is the media through which the mind is conveyed to the remotest molecule in the human structure. The three nervous systems are so arranged that execution and sympathy are at all times carried on throughout the great house the mind inhabits, and that the interference with the media through which mind is conveyed intercepts the communication, and a suspense of the orders follow.

There could not be two minds controlling the body and have harmony throughout it, as is always the case when all of the nerve structure is in a healthy condition, when the lines are in order.

It is a fact that mind uses the physical organism to convey intelligence to all parts of its domain; that when the physical is interfered with, the intelligence, the thought, is either cut off entirely or imperfectly executed from disturbance of the media through which execution is performed. This we know from the experience of all of the diseased conditions known to exist. No disease is known to exist anywhere in the body when all of the nervous system is in natural working order. There certainly does not appear to be a necessity for two minds. Simply because the sensory nerves do not manifest consciousness is no more a mystery than that the motor nerves do not manifest sensation. The mind controls the body, and it does so through its own media, the nervous system, and if so, has it not power to withhold sensation when it prefers, and run the physical forces, while the human sensibilities are unconscious, or even to render them immune from impressions? To conjure up any hypothesis that would subject a necessity for two minds seems wholly unnecessary, and an excess without a reason. That the nervous system is the media of communication, and not any part of the controlling influence, seems the only plausible hypothesis of control of mind over matter.

SUGGESTION — HOW DOES IT AFFECT THE PHYSICAL ORGANISM?

That a metamorphosis takes place in the physical organism all the time we have been thoroughly convinced. Any one may ascertain this fact by making a small notch near the matrix of either one of the finger nails, and observe its gradual growing out. That the body is constantly undergoing a state of change, being renewed day by day, is a proven proposition. What law regulates this metamorphosis, and how it is done, are questions of a profoundness little thought of by the masses. That such a condition should take place with absolute uniformity and unerring certainty presupposes an omnipotence somewhere. That such a change should go on at all times, whether we be conscious or unconscious of it, is a known fact; but how it does it or is accomplished is the problem which we are seemingly least concerned about, and is almost wholly relegated to the unknowable. That Deity rules all

his works in order, we only have to turn our eyes to the "starry decked heavens" to verify.

When we turn to ourselves and look inward, and survey our frame, bones, muscles, brain, blood vessels, internal viscera, the various departments, glands, heart, and nervous systems, and digestive apparatus, and eliminative organs, and see the processes called functions carried on, we wonder how it does it, and what it is that does it. A thought conveyed through one or more of the five senses to the brain creates a desire; that desire is manifested at some nerve center in the brain, expressed at the end of the filament emanating from the faculty center, conveyed to the end footlet of the filament, and there executed. If more than one faculty demands attention or is necessary to execute the message, others are notified through the sympathetic nerve filaments, and there is no delay in bringing all the forces required to execute the order. The same thing occurs in every department of the great cosmos, the human body. Order and harmony prevail. Whether this thought be made by suggestion and a necessity demands it, mind superintends every department, and all and every part receives the attention needed.

The same thing occurs when disease pervades the body, but perhaps the faculty which superintends the particular part diseased is from some cause intercepted from communication with the particular locality over which it presides from pressure along the line of nerve filaments, and a suggestion is needed to call attention to the fact of negligence, due to communication being cut off, or deficiency of development of the faculty, there needs to be a suggestion to stimulate that particular faculty to activity. Repeated suggestions start the flow of blood to the faculty; it is stimulated; execution begins at once. When we consider that faculties are strong or weak, according to their cultivation, the reader will readily comprehend how a strong faculty may divert the normal attention, and leave a part of the system with such scanty rations as to inharmonize the whole body in time. Suggestions often repeated and intensified are received by the faculty which has been derelict in duty, and the part which lacked is supplied, hence the good of suggestion.

Physical manipulations act the same way, but frequently from the other end of the line. Some nerve filaments may be unduly impressed and produce irritation at end filaments, and these irritate muscular tissue, and contractions ensue; nerve filaments may be involved, and our manipulations, adjustments, free the impingements, and harmony be restored. The nervous systems are so many tubes, wires of communication of thought, mind, and one who has anything like a clear idea of nerve origin and distribution, and knows how to adjust or suggest, is certainly in a position to apply the principles enunciated herein. The mind, remember, controls the body through nerve filaments as the media of transmission of the orders from headquarters

A knowledge of phrenology becomes a leverage worth considering in the execution of the means essential to harmonizing the body, for one can tell how the patient thinks, and as thought controls the individual, it becomes a necessity to know what he thinks, along what lines, so as to know what means to use to harmonize him.

The constant use of a certain line (nerves) anywhere in the body exhausts the elements of lines, and necessitates a draft upon the general supply, and through continuous use of one set of lines the whole body may become involved in the loss from overdraft thereon. This is why it is essential to know how to "shut off the waste" and "rebuild the deficit," and keep it supplied, and constantly avert the leakage — keep the leakage stopped. From the foregoing one readily sees the necessity of understanding the various parts of man anatomically, physiologically, phrenologically, and psychically, to be able to deal in an intelligent manner with his fellow man in the capacity of a healer. Medicine is not a necessary desideratum in what we term the healing art. To know how to stop leakage and adjust or harmonize the body with itself is all that we need to know to be healers in the true sense of the term. All this is embraced in this book, or suggested at least.

"AS A MAN THINKETH IN HIS HEART, SO IS HE."

This was uttered by the wisest man we have any account of in all the history of the ages. If a man is not as he thinks, will

some wiser man than Solomon tell what he is? I am inclined to favor the sentiment of the maxim, and take it for granted that it is so. Tracing the development of character from infancy, and noting carefully the environments as well as the character of the suggestions given in a given case, it develops certain portions of the individual's head according as environments and suggestions have made their influence upon the person under consideration. If, for illustration, the child has had certain thoughts presented which intensified its destructiveness, firmness, acquisitiveness, secretiveness, constructiveness, combativeness, alimentiveness, and these alone, we find that individual fully bent on evil. No amount of influence exerted would prompt that individual to refrain from committing any sort of a crime that would best suit his purposes. But should his mind be directed to something different than what these faculties indicate, to conscientiousness, veneration, spirituality, cautiousness, philoprogenitiveness, conjugality, human natures, hope of a life beyond, individuality, causality, comparison, and all these be fully developed, and an approbative sentiment inculcated with comparison, and the thoughts continually concentrated along the lines indicated by all these faculties, leaving the first named as we left him, any one can see at a glance that there would be a modification of his character largely molded accordingly; and in proportion as he thought along either of these lines would he be in action, in habit, in character.

The science of phrenology certainly corroborates the truthfulness of that maxim. No nation of people ever thought right all the time but what their every act was a model of human perfection. No individual whose mind is constantly on the moral side of any course of conduct but what his conduct is conformable thereto. Our thinking is as suggestion and force of circumstances influence us, and early training along certain lines of thought makes the results accordingly. Forced suggestions along the various religious lines of thought make results as we see them around us daily.

It is a maxim of considerable antiquity that says, "As a man thinketh in his heart, so is he," and I am inclined to favor the conclusion of the maxim, notwithstanding a "darky" may stand

in the pulpit and preach what "he thinks is gospel"; yet if he has small conscientiousness, alimentativeness large, acquisitiveness large, and constructiveness full, woe be to the hen roost on his way home. Simply because his appetite was stronger than his conscientiousness and spirituality, and he thought it right for his appetite to be gratified, because his thoughts were stronger in that direction than in any other, and yet he might have been zealously religious. Notwithstanding certain traits lead all men and all people, every individual becomes responsible for the way his faculties lead him, after he has been taught a higher law than human law. If there were no higher law than human law, there would be no standard of right in the world, for every one would be governed by faculty influence, and that would be his only guide; then "might would be right" in every one's estimation. That state of things the history of the ages fully demonstrates, without argument.

The Creator recognizing man's nature, and after mankind had demonstrated his inability to govern himself, he gave to him law. This was a rule of conduct for a certain purpose, that men might dwell together "in unity." Now comes the climax of all facultative uses, and that of the will is the only one addressed as regards assent and compliance with a rule of action. That faculty brought into obedience to the higher power was to make peace on earth among men, and the law must be of such a nature as to transform the individual, individually and nationally, into an image of the things expressed in the law, and make the obedient like the Lawgiver himself. So long as that state prevailed man walked honorably among men and had the approval of his Lawgiver, God. All men even now are the image of the thing they think the most of; that is, their lives conform more nearly to the way they think than any other way.

The will power, firmness, properly enlightened, should be the ruling faculty of the "forty-two" in the make-up of human character, for it brings all things into subjection we have to do with, and in whatever line we start out on. If we have a firmness sufficiently strong, we accomplish whatever is within the capability of man to do.



We assume that if all individuals from infancy had environments which would be conducive to the rounding out of all the faculties, and that if all had a pure standard of precepts, uncontaminated with perverted nature, every avenue of life would be capable of the highest fulfillment, and a perfect harmony would exist from the incipency of childhood to old age, and evil would not be known, for if "the child were brought up in the way he should go, he would not depart from it"—he way he should go. This would so depopulate Satan's kingdom that it would finally fall for the want of subjects; but that time is not likely to be ushered in while every man presumes to be "a law unto himself," and while the baser faculties predominate. If we know the "two ways," and the consequences of a trip on either, and choose to take either, who is responsible for the outcome?

This is enough for one article, but I could not say less and say what I have said, enough, and have no room for apologies.

THE SECRET OF THE "CHRISTIAN SCIENCE" IN CURING DISEASES.

It would be foolish on the part of anyone to ignore the fact that through the application of their methods that many cures are effected. We see them every day.

The fault they have and the mistake they make in attributing their cures to something foreign from themselves, and their assertions that "We are not mortal," "We only think we are," have nothing to do in the matter of curing or their subjects getting well.

THE INSPIRATION IN THE MIND OF THE PATIENT.

As a matter of fact, confidence in the thing desired, hoped for, being engendered in the patient, and a steady holding on to that idea, believing it with all the heart, soul, and mind, by the means of cure. The fact that so is he," is verified in

The willingness to get well—to place one's self *en rapport* with themselves, having a will to get well—and carry out the suggestion that they will get well, exercises every emotion in the body and mind, controlling every tissue, building every atomic cell, why not harmonize the molecules so as to restore the harmony? This done all is accomplished in the body diseased that can be accomplished—whether one believes in God, angels or devil.

The Yogas of India are as successful, in cures, as the Christian Scientist, and cure on the same principle, and in the same way. The thing to do is to exercise faith in the thing desired—the thing to be accomplished—and the means employed.

The idea of attributing the cures to some divine power, and quoting Scripture to prove that such is the case, does not comport with the teachings of the book itself—for the “Lord is no respecter of persons,” and “God heareth not sinners.” Better learn the truth and get right on this, as well as all other subjects. “Be not deceived; God is not mocked.”

THE ABSOLUTENESS OF RESULTS FROM SUGGESTION.

That the cures have been legion from the effects of suggestion, needs only to be said to be believed to be true. There has been thrown around this word so much mystery, and so many opinions have been expressed about this word and what its scope is, that confusion reigns everywhere. That repeated suggestion will bring one under complete control of the suggester is an undeniable fact; but how suggestion cures disease or in any way changes pathological conditions is not so easily defined, described and understood.

That mental science healers, Christian Scientists and suggestive therapists, all, have effected wonderful cures is taken as a certainty; but why do all these different ways of mental suggestions work such marvelous results? The Christian Scientists claim that they are not mortal but only think so, and hence to fix the mind on something else than personal, physical existence, and believe that one is only spirit, obliterates all thought of physical existence, and fixes it on the idea that disease does

not exist—only in the mind. The very *thought*, along lines which leads one to quit thinking of disease, is the *power* that *cures*. The suggestion that one is well, getting well, and that disease cannot exist, is a power which cannot be weighed or measured. This is not on account of anything we read in holy writ, for that would impugn the very motives of Deity, and would be sin. The mental scientist, or the Oriental Indian, exercises as great a power, and effects as many wonderful cures as the one who claims divine power, and supplements his treatment by an assumed divine power which has no relevancy to the conditions whatever.

Such authority was never delegated to any living mortal since the days of the apostles—and to them for a special purpose—and when that purpose was completed, the power to heal, miraculously, ceased.

That suggestion, rightly made and persisted in, accomplishes many wonderful things in the way of cures, is an admitted fact, undeniable; but what we desire the readers of this book to know is, that there is no such thing as “a divine healer,” *per se*, on earth to-day, nor never has been since the last apostle winged his way to the world of spirits. All mental healing is the result of a proposition *believed*—made strong enough to convince the one to whom such suggestion is made, to firmly fix the thought in his or her mind—and the subject persistently continues to believe the proposition.

The fixed thought on any assertion, if believed, brings corresponding results. It is the mind which controls the body, and as “we think we are,” and no argument can change us until we give up the thought or exchange it for another one. The how mind cures, we do not presume to state; but that it does, needs no proof. If all men who have disease had strong enough faith in their inherent recuperative powers to persist in the thought, and do the things necessary to carry out the thought, all functional human ills would get out of the body and leave it “swept and garnished.” Without faith, nothing intelligent can be done. Implicit confidence in the right sort of means used effects wonders. We “walk by faith” in everything we do—and this mean-

ing confidence—we all walk this way when we desire anything done, disbelieve it who may. This proposition stands out in bold relief and is irrefutable. Suggestions made are as numerous as the thoughts of men. All impressions are the results of suggestions. All religions are the products of suggestion, and these repeated often enough to fix the mind on the idea advanced—and then a yielding takes place—and the subject is a convert. Whether true or false, the result is a product of the thing believed. Argument is useless with these premises—they only need to be thought of to convince any one of their absolute truthfulness.

We then advise every invalid to fix his mind on some reasonable method of healing—and apply it faithfully and persistently—and the results will be favorable, in all curable cases, with the conditions acted in the direction of obtaining that end.

It requires both “faith and works,” where both are needed, in every case, religiously or physically. We recommend all natural means in the treatment of all conditions called disease. Whatever is needed should be done. To decide this question requires much thought and the laying aside of all prejudice and preconceived opinions, and received with meekness and acted upon with full assurance of success, it will be achieved in due time.



THE DIET.

The body is composed or made up of elements, and these elements being manufactured from the food eaten, there should be some consideration as to what is eaten; for each and every article of food ingested influences results as to constituency of the elements, and goes to make up the nutritive and non-nutritive products of which these elements consist. The kind of food eaten also determines the state of health, growth and conditions of body, mind and health. An excess of foods containing a large amount of carbonates injures the digestive apparatus, and tends to increase fat-accumulation, whereas an excess of the nitrates has a tendency to develop muscle, and so we see that it is essential that proper food and a proper proportion be used in order to have a normal condition of development, and to maintain normal weight, normal activity, normal energy, and all that maintains the harmony of the body and brain, and normal nerve power to carry on the functions of life naturally.

It will be seen from the following table that each article of diet named possesses certain quantities of elements, and that their use will determine the product, so that any one may select from the list the kind of food desired to produce conditions desired, either to remain strong and healthy or to dwindle down to a mere skeleton; and one will note the fact that it is as much of a necessity to eat the proper food, to be well physically, as it is to think the right thoughts, to be the right sort of an individual in society — harmonious and a law-abiding citizen. Whilst mind rules the body, food determines its physical means of manifestations, and all the chemical elements are essential to a perfect physical being. What we eat, then, is a matter which demands our special consideration, if we regard this body of ours as we should, the temple in which we dwell while here on earth.

The question of how to eat and what to eat are important factors in the health and happiness and longevity of the human race. What we eat constitutes the elements which make up the various departments of the house in which we live; hence should be earnestly considered. The diet which is needed consists largely of cereals, vegetables, and fruits, nuts and grains. We scarcely need to consider meats, for they are not necessary, but rather injurious. All sweetmeats, pies, cakes, and all pastries, puddings, and fried victuals should be avoided; for they are excesses which require extra efforts of the system to eliminate. One can not purchase health in drug stores nor of doctors; for it does not come from them. All stimulants are useless and injurious.

The greatest physical and mental feats are performed by those who never eat meats nor use stimulants. Are not these facts worth consideration? Whole-wheat bread should always be the bread eaten. Fermentation destroys the nutritive properties of all kinds of food. Obedience to the laws of hygiene should be observed by those who desire health and comfort as well as long, useful, active life. The proper mastication of foods deserves our special observance; for without thorough mixing of the saliva with the food it is not absorbed, even after it has passed through the stomach and the duodenum, and received the secretions from stomach and liver and pancreas. Nature's laws are important as well as imperative, and the penalty follows the violation of them sooner or later. The millions of dollars expended every year for "dyspepsia tablets" speak in thunder tones the truth of the effects on the stomach alone, to say nothing of the billions expended for medicines for effects on the general system, and still the cause remains, and will remain, until the masses are taught how to eat, what to eat, and a rational, natural method of living is adopted and practiced.

SOMETHING WORTHY OF CONSIDERATION ABOUT DIET.

The beef eaten should not be the product of offal of breweries, and distilleries, and swills, collected from restaurants or elsewhere, but should be made of good grain and grass. Cattle, to be

healthy, should be fed on healthy food. People, to be healthy, should be fed on healthy food. To feed milch cows on impure food, and then go through a process of what is called "sterilizing" it to kill imaginary germs, will not improve its quality.

Whilst milk is designed for the young, it is a matter of importance that it be natural and from healthy cows. Human milk for infants will be all the nourishment they need, until the glandular system is developed enough for other foods, and the teeth are also developed so as to masticate it properly. The chemical elements in milk differ in different animals in proportion as their animal natures differ.

Nature has made provision for every variety of the animal creation to be provided for from the soil, and these need no material changes or compounding, or preparing by man, save the cooking of some articles, to fully satisfy all of the conditions necessary for growth, preservation of health, and perpetuation of life to good old age. It is best to leave Nature to herself and follow her dictations.

When we consider the results of indifference in this regard, we have forced upon us forty thousand or more tooth doctors constantly repairing teeth which might have been sound and doing duty as Nature designed them to do, had the owners have known Nature's laws and observed them.

Much damage, we admit, has been done by the use of mercurials administered by doctors and others, which have aided in the demoralization of the mouths of many. It is certainly time to consider our manner of living somewhat seriously. More care and attention paid to studying the nature of the body, its elementary chemical constituents, and what sort of elements are essential to the helpfulness devolving upon us in maintaining a normal condition, would better be spent, than depending upon an ignorant set of men called doctors every time a pain is felt. We maintain that health is the normal condition of humanity, and would be maintained if the proper hygienic laws were observed. There are no substitutes for natural laws. Whenever we conform to Nature's laws, we enjoy all the freedom necessary to be a physically healthy being. We demonstrate this proposition

to be true by enforcing the rule in our treatment of the afflicted, who come to us for treatment of their ills, for they get well under this regime. The return to the natural order of things is therefore a necessity.

It is altogether probable that the majority of people eat three or four times as much as should be eaten, especially of starchy foods, as are digested; because the mushes, pies, cakes, potatoes, sweet meats, hot bread, coffee and tea, water at meals, and hasty eating, all conduce to impair the digestive organs. The habit of fast eating, failure to masticate the food before swallowing it, or washing it down with any sort of fluid, tends to dry up the secretion in the glandular system in the mouth, and imposes upon the secretions further on, in the alimentary canal. Nature has provided the human body with every facility to keep itself in a normal condition, and when conditions are maintained, she does it harmoniously. Right at the very threshold of supplies entering into the house in which we live there stands the janitor with a double row of guards, under and at the sides of the gateway, the passing of which, without undergoing a thorough process of grinding and mixing with the secretion, called saliva, which flows out and into the mouth while the grinding process proceeds, imposes upon the next department, so that, in time, great damage is done to it, as well as to the glandular system in the mouth. Everything in nature is governed by law, and the violation of that law brings its certain results, sooner or later.

CONCERNING DIETARY MATTERS.

There is much in the diet of the person as regards health. Nations are healthy as they conform to certain conditions of living, and in proportion to the edibles consumed, for the food furnishes the blood, and the blood containing the life, the kind of life is a product of what the individual eats,—or at least it has much to do with the blood status, as the thoughts do the state of the body, as to character. There being certain elements in normal blood — blood in a perfect state of health — it should be the object and aim in the individual to see to it that the food

ingested contains the normal elements from which the blood is formed, in order that there be no lack. The edibles contain special constituents chemically, and these are in different proportions, as regards the fundamental elements of carbon, hydrogen, oxygen and nitrogen, and some one or more of these necessarily enter into all the cereals, vegetables, and various kinds of meats used as food for diet everywhere.

There are some persons who seem to thrive on a certain class, as it were, which another class do not seem to relish at all; and these facts are sometimes confusing to those who do not take into consideration the proportion of elements in a particular diet for certain circumstances, or avocations or climatic influences of certain individuals, and of certain temperaments, avocations and environments generally and specifically. All of which are essential to be considered, as to a wise selection of food for every individual, in the various avocations and relationships of life, habits, etc.

The leanness of the person, the disposition to eliminate all that is ingested without the accumulation of what we call adipose, suggests the kind of food necessary to increase it. The opposite is necessary in the one whose system seems to get plump on the food eaten. The habits of the people should receive a careful consideration, and the results of dieting may be as accurately determined as any other condition we are called upon to arrange, in each and every person we are called upon to prescribe for, to produce a change from their present condition to one of a different condition as regards health, or a continuance in a course which annuls all the effects of even proper treatment, for we are of what we are made up of, the food, air and fluids — water — and these are controlled and directed by a mental condition, whether we know it or not — a sub-conscious care for our bodies at all times, whether we are awake or asleep. Results follow; silently though they may come, they do come, and we may direct them wisely if we will, if we only know how to direct the causes and relations of our environments, including a will power which results from concentration of thought along specific lines.

THE QUESTION OF DIET CONSIDERED.

It matters what we eat. A wise consideration of what we eat should be had. What we eat indexes our condition, and we may know a people by what they eat. We are a product of what we eat and what we assimilate therefrom, for we are made up of elements. These elements are in the food we eat, the air we breathe, and the water we drink, for out of these the system is furnished wholly. The elements in the food are what the system forms the entire structure from. A deficiency of any one or more of these elements in the food ingested shows itself in the body in some way, and sooner or later the exhaustion of the element or its deficiency in quantity produces inharmony in the whole body.

The blood being "the life of the body," and the blood being a product of the food of which it is made, and this all comes from what we eat, does it not appear reasonable that we have regard to what we eat, if we desire proper products? The cardinal elements in food products are carbon, hydrogen, oxygen and nitrogen; and then no less than sixteen other elements, called minor elements, constitute the inorganic elements of the food necessary to supply the various compounds of which we are made up. In the uses of certain organs, in performing their several functions, certain elements are exhausted, and as these elements are the product of certain kinds of food — for these elements are in certain foods in greater quantities than in some others — and in proportion as these elements are in excess in foods, it becomes a matter of importance as to the selection of the articles to eat, for an element used in certain exercises more than in a normal way must be supplied, or the whole body soon shows inharmony, and a general draft is made on other parts, and in proportion as these are used, the system becomes depleted, and a general enervation ensues, which, sooner or later, undermines the constitution of the whole body, and disease of some kind manifests itself somewhere or all over the body. Thus we see the necessity of a proper selection of diet at all times if we desire to maintain harmony or health.

The carbonates should exceed the nitrates by about four to one in quantity in order to a maintenance of health, and the

nitrates should have a sufficient amount of the phosphates in order that sufficient nerve element be furnished to generate the glandular secretion in sufficient quantities to digest the food for assimilation, and if fat is desired, the carbonaceous materials should predominate, but if muscle and a good supply of nerve power be desired, the nitrates and phosphates are to be used. Due regard to the diet, all else being equal, we can accommodate ourselves with whatever element desired, for whatever purpose we desire, so far as utility of diet is concerned, recognizing the fact that the *mind*, through the nervous system, controls all action in the body, assimilation and elimination, and all feeling, sensation, motion; and the nerves are conveyances of our thoughts to all parts of the body, and absolutely control every function we have to do with anywhere, for through these nerve filaments communication of mind is carried on at all times.

We wish it to go down the ages that we enter our solemn protest against the use of "predigested" or prepared foods, as commonly throught the markets — sold for the ostensible purpose of making money off of the unwary and ignorant. These foods are disease generators, and should be given a "go by." Nature made provision for its own digestion, and if the organs of digestion are normal, they need no help, and if not, predigested food, or any other sort, has no business to be placed in the alimentary tract with the expectation of assimilation, for it will not be accepted, nor will it be possible to care for it, and wisdom would say, Keep it out, and reinstate harmony in the digestive tract, and then nature will perform her functions, and will not, and can not, without. Ingesta, without there be a condition of health in the digestive tract, produces decomposition of the elements, a chemical change, accumulation of gas, foreign substances, which only produce irritation, and paralyze terminal nerve fibers and drain their secretory capacity, necessary to the digestive process, and finally incapacity altogether ensues, and then any pathological condition may result. The capacity of an organ depends altogether upon the nerve power governing it, and should never be overlooked by the intelligent practitioner of this or any other *system*. These hints should be sufficient for general purposes for

all time. Every practitioner should learn the properties of food, and use them for a purpose, and not consider the stomach a receptacle for every unclean and unwholesome thing, a general "waste basket," a "dumping ground."

THE FOOD PROBLEM SOLVED.

Recognizing the necessity of the elements in the food eaten, we give a table which contains the proportion of carbonates, nitrates and phosphates of each of the articles named, and from the foregoing a proper diet may be selected for whatever purpose desired; and if the nervous system is free from strain and pressure anywhere and everywhere from origin to terminus, there can be no question as regards results.

THE CHEMICAL CONSTITUENTS OF FOOD.

NAMES.	Car bon-ates.	Nitrates	Phos-phates.	Water.	Waste.
Asparagus	5 4	0 6	9 4	95 6	....
Bacon	62 5	8 4	0 5	28 6	..
Barley	53 1	12 8	4 2	14 0	16 9
Beans	40 0	24 0	3 5	14 8	17 7
Beef	14 9	19 0	2 0	65 0	....
Buckwheat	53 0	8 6	1 8	14 2	22 4
Butter	100 0	..	..	..	....
Cabbage	6 2	1 2	1 8	91 3	0 5
Carrots	12 2	1 1	1 0	82 5	3 2
Cauliflower	4 6	3 6	1 0	90 0	0 8
Cheese	28 0	30 8	4 7	36 5	....
Cherries	21 0	9 6	1 0	76 3	1 1
Chickens	1 9	21 6	2 8	73 7	....
Chocolate	88 0	8 8	1 8	....	1 4
Clams	trace	12 0	2 5	..	....
Codfish	1 0	16 5	2 5	80 0	....
Corn—Northern	67 5	12 3	1 1	14 0	5 1
Corn—Southern	39 2	34 6	4 1	14 0	8 1
Cream	4 5	3 5	..	92 0	....
Cucumber	1 7	0 1	9 5	97 1	0 6
Currants	6 8	0 9	0 3	81 3	10 7
Dates, fresh	73 7	..	..	21 0	2 3
Eels	little	17 0	3 5	75 0	....
Eggs—Whites of . . . . .	..	13 0	2 3	87 2	....
Eggs—Yolk	29 8	16 9	2 0	51 3	....
Figs	57 9	5 0	3 4	18 7	15 4
Flounders	little	15 0	3 5	78 0	....
Green Cabbage	26 8	0 3	..	71 0	1 8
Haddock	0 6	14 0	2 6	82 8	....

THE CHEMICAL CONSTITUENTS OF FOOD.—Continued.

NAMES.	Carbonates.	Nitrates	Phosphates.	Water.	Waste.
Halibut	little	18.0	4.5	75.0	....
Ham	32.0	35.0	4.4	28.6	...
Herring	little	18.0	4.5	75.0	...
Horseradish	4.7	0.1	1.0	8.2	16.0
Kidney	0.9	21.2	1.4	76.5	....
Lamb	14.3	19.6	2.2	63.9	....
Lard	100.0	....	....	....	....
Lentils	39.0	26.0	1.5	14.0	18.5
Liver	3.9	26.3	1.2	68.6	....
Lobster	little	14.0	5.5	79.0	....
Milk—Cows'	8.0	5.0	1.0	86.0	....
Milk—Human	7.0	3.0	9.5	89.0	...
Mutton	14.0	21.0	2.0	63.0	....
Oats	50.8	17.0	3.0	13.6	15.6
Onions	5.2	0.5	0.5	93.8	....
Oysters .....	....	12.6	0.2	87.2	....
Parsnips	14.5	2.1	1.0	79.4	3.0
Pearl Barley	78.0	4.7	0.2	9.5	7.6
Pears	9.6	0.1	....	86.4	3.9
Peas	41.0	23.4	2.5	14.1	19.0
Pigeon	1.9	23.0	2.7	74.4	....
Plaice .....	....	14.0	5.5	80.0	...
Pork	16.0	17.5	2.2	64.3	....
Potatoes—Irish	15.8	1.4	0.9	74.8	7.1
Prunes	78.6	3.9	4.5	13.0	...
Radishes	7.4	1.2	1.0	89.1	1.3
Rice	82.0	5.1	9.5	9.0	3.4
Rye	75.2	6.5	0.5	13.5	4.3
Salmon	little	20.0	6.5	74.0	....
Smelt .....	....	17.0	5.5	75.0	....
Sole	0.8	17.0	2.5	79.7	....
Suet	100.0	....	....	....	....
Sweet Potatoes	21.8	1.5	2.9	67.5	6.3
Trout	0.8	16.9	4.3	78.0	....
Turbot	little	17.0	5.5	79.0	...
Turnips	4.0	1.2	0.5	90.4	3.9
Veal	14.3	17.7	2.3	65.7	....
Venison	8.0	20.4	2.8	68.8	....
Vermicelli	38.0	47.5	1.7	12.8	....
Wheat	66.4	14.6	1.6	14.0	3.4
Whey	4.6	....	0.7	94.7	....
Whiting	little	15.0	5.5	78.0	....

REGARDING DIET DURING SICKNESS.

When one is sick, the system has gone on a "strike," (forcibly, perhaps), but it needs no food until nature is prepared for it. Remember that the digestive tract suspends its operations of

building when the nervous system which controls secretion in the glands has shut down. The reinstatement of the functions of digestion must be considered before food is thrown into the "mouth"—the grinder, the mill; for when the machinery is out of repair, there will be no manufacture of the product, and the system is taxed unnecessarily, and the evidences of incapacity will be seen very soon by an increase of temperature in the body of the one sick who indulges in eating. Water in small quantities is the only admissible article into the system as long as evidence of impairment of the digestive organs exist, and this is the coated tongue. Refer to what we say about diet in the Osteopathic department of this book, under the head "Typhoid Fever."

MEDICINES AND PATENT CEREALS SHOULD ALWAYS BE AVOIDED.

Live on the kind of food which contains the elements needed,—natural food, and in moderate quantities,—for twice as much food is used as is needed. We should regard food as a necessity to live on, and not simply live to eat, for that is all any animal knows; but intelligent beings should eat to live, and not live simply to eat. Recognizing the necessity of the elements in the food eaten, or to be eaten, we submit a table which gives a comparison of the quantities of elements contained in each article presented, and from it a selection may be made of the food necessary to supply any, or almost any, demand, and the list may be extended at the option of the individual, as occasion, climate or locality demands.

It will be remembered all the time that due regard must be had to supplying the nerve elements, for upon these depend the health and well-being of everybody.

A proper supply of the right kind of food and the removal of nerve impingement and nerve strain constitute the whole problem of comfort, pleasure, health, life.

It is not all in knowing how to remove nerve strain and nerve pressure, for there must be a supply furnished to rebuild the lost nerve substance which has brought the individual to the condition found, and for which treatment is demanded.

Chemical elements supplied in the form of food must receive careful consideration.

Due regard to the above facts bring about a condition called health.

Do not forget that the nervous system is built up by the kind of food eaten.

DYSPEPSIA-INDIGESTION. ACID AND ALKALINE DYSPEPSIA.

This is a condition of enervation, brought on by errors in eating, the how of, and the kind of food, and the condition of the mentality during the meal, or continued and unremitant thought on study, business, or anxiety during and after eating. The lack of care to give the digestive organs sufficient opportunity to digest the food eaten.

As a rule, the dyspeptic is a careless kind of mortal as regards the manner of eating, or one who never thinks of his food after it leaves the mouth, but keeps up a continual thought about business or fears he won't get enough to eat the next meal. In a word, a *gormandizer stuffing the stomach so full that the nervous system cannot manufacture secretions enough to digest the contents of the stomach*, hence it sours; becomes acid; or simply lies in the stomach as inert matter, showing a paralyzed nerve function which ends in the stomach itself. There are so many conditions and causes of nerve disturbance that this book would not be large enough to delineate all the various causes attributed to this condition called dyspepsia, that we shall not attempt to say much more; for the causes are as stated above—and if they were removed dyspepsia would not be. The dyspeptic is generally the producer of his own condition, and if he would exercise the same common sense in eating that he is capable of in other respects, he would soon get rid of his dyspepsia. Never crowd the stomach with anything that has to be digested; eat slowly; masticate every mouthful of victuals thoroughly; keep in a good humor at meals, and leave business thoughts out while eating, and for an hour or two after meals. Drink but little, if any, fluids, while eating; live on plain, simple, wholesome food. Leave out, of your dietary list, all slops,

sweetmeats, pies, pastries and fatty foods. Eat to live—not simply live to eat. Take moderate exercise; bathe the body every morning, either in a weak salt water solution or Epsom Salts—and especially the latter when the skin is dry or when there is a rash over the body (*showing retention of toxic matter from undue exposure: capillary engorgement and closure of the pores of the skin*).

The deep breathing and constant inhalation of pure air is an essential to health. The above course of living, exercise, and plenty of *lemon juice*, will keep up a natural state of mind and body—and dyspepsia will vanish, and health will be yours all your life.

The best remedy for all stomach troubles is the spinal treatment, at about the *eighth dorsal*; *this unites the forces and neutralizes excesses of either the one, or the other secretions—from the splanchnic, or the pneumogastric nervous systems, and harmony is restored*—and then, with a little care as to eating, *even to fasting a day or two, continuing the spinal adjustment daily, will soon put an end to the dyspepsia.*

THE NO-BREAKFAST PLAN.

That too much tax is placed upon the digestive system needs no proof further than that of disease of every form increasing and becoming more malignant and distressing. The larger proportion of the glandular system is overtaxed by excessive eating. Coupled with gormandizing, is the habit of *gulping* down the food with but little, if any, mastication, permitting the food to pass the mouth into the stomach, and on into the duodenum without being properly mixed with secretions in each department—unmixed with the food—and thereby taxing the entire system unduly, to eliminate the undigested, non-assimilable substance, which, instead of being food to build up the body, is only a tax, an unnecessary and injurious expenditure of the nerve forces to get rid of it. The system needs rest, and to maintain a normal condition, keep well, and be strong and able for the duties and labors of life, and to perform them without fatigue, rest must be had, so as to enable the nerve

power to recuperate—and be able to manufacture the food eaten into blood. The exhausted glandular structure must be restored, renewed; and the blood, circulating through them, must have the normal elements which form the secretions, necessary to serve the purpose intended in each department of the digestive apparatus. To accomplish this, the larger majority of people would profit by leaving off the morning meal entirely. Every known condition, caused by *excessive eating*, would then get well, simply because the excess would not exist—would not accumulate in the body, to cause a necessity of elimination of that excess—which overtaxes the entire physical organism.

This would save much labor, a vast amount of food, and time spent in eating, much distress caused thereby, and afford opportunity of devoting the time, and cost of food, to something better; more useful to one's self, and to humanity generally. Adopt it. You will not starve! It will equalize the forces, and keep you in a normal condition. You will neither be too *fat* nor too *lean*—but natural, strong and healthy. Drink plenty of water and you will not get hungry, and you will not want excesses, stimulants nor tobacco. Your old chronic ailments will be things of the past, and if you will breathe the pure air of heaven and sleep in well ventilated apartments you can bid defiance to disease. Think along right lines, live with a view to do good in the world.

THE KIND OF BREAD TO EAT.

Bread, to be the "Staff of Life," should contain the natural elements of the grain from which the flour is made—all of the elements of the wheat.

HOW TO MAKE THE ENTIRE WHEAT BREAD.

Scald one cup of milk, and add one-fourth of a cup of butter, one-fourth of a cup of sugar, one teaspoonful of salt and one cup of warm water, and then add one yeast cake, moistened in one-fourth of a cup of warm water, and then add three cups of entire wheat flour and one cup of white flour to knead. Let

rise to double its size-bulk; shape into loaves and let rise again, and bake in a moderately hot oven, forty-five to sixty minutes.

HOW TO MAKE GRAHAM BREAD.

One teacup of white flour, one-half a teacupful of Porto Rico molasses, one-half cupful of good yeast, one teaspoonful of salt, one pint of warm water, and sufficient Graham flour to make a dough as stiff as can be stirred with a strong spoon. This is to be mixed at night, letting it stand over night. In the morning, add one teaspoonful of soda, dissolved in a little water; mix well, and pour into medium sized pans, filling them about half full. Let them stand in a warm place until they rise to the top of the pans; then bake one hour in a moderately hot oven.

The bread should be covered about twenty minutes, when first put into the stove, or oven, with thick paper, or any tin cover will answer, to prevent the upper crust from hardening before the loaf is well risen.

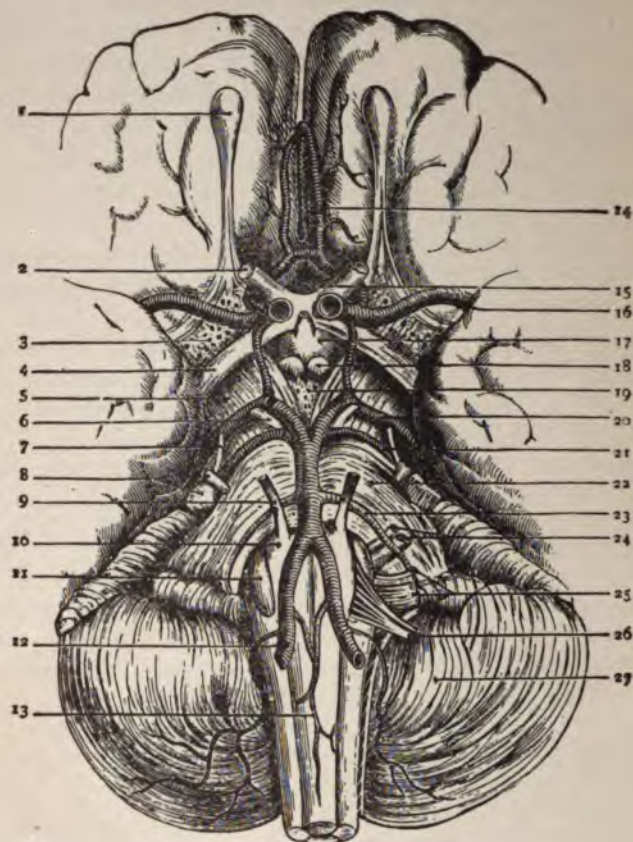
If these directions are strictly followed the bread will not be heavy-sodden. This is the best bread for everyday use of any other sort and needs no changing.

WHOLE WHEAT BREAD. (AS MADE IN THE FAMILY OF THE AUTHOR.)

Every housewife makes light bread, using white flour. This bread is only one-fifteenth as nutritious as whole wheat bread. The whole wheat bread is as easily made as any bread and the flour is no more expensive than the white flour. Prepare the yeast the same as for any other bread and when ready to mix, use the whole wheat flour instead of the white flour and let rise just as you do the white bread and mold the same and bake as any other bread is baked, and you will have a bread that will nourish the family and be relished by all.

In the matter of diet, there should be regard for the kind eaten for special purpose. To make fat, carbonaceous foods are the kind that make people fat. Nitrogenous foods, combined with phosphates, build up the muscular and nervous systems.

The combinations may be found in the list of articles of diet in this connection. The individual must be the judge of the kind of diet he needs, and what agrees with the digestive organs and not injurious, keeping always in mind to thoroughly masticate every mouthful before swallowing, so as to prepare it for each step in digestion.



THE BASE OF THE BRAIN.

1. Olfactory Bulb. 2. Second, or Optic Nerve. 3. Anterior Perforated Space. 4. Optic Tract. 5. Crus Cerebri. 6. 3d Nerve. 7. 4th Nerve. 8. 5th Nerve. 9. 6th Nerve. 10. Pyramid. 11. Olivary Body. 12. Vertebral Artery. 13. Anterior Spinal Artery. 14. Anterior Cerebral Artery. 15. Lamina Cinerea. 16. Middle Cerebral Artery. 17. Tuber Cinereum. 18. Corpora Albicantia. 19. Middle Perforated Space. 20. Posterior Cerebral Artery. 21. Superior Cerebral Artery. 22. Pons Varolii. 23. Inferior Cerebellar Artery. 24. 7th and 8th Nerves. 25. 9th, 10th and 11th Nerves. 26. 12th Nerve. 27. Cerebellum.

THE ORBITS.

Describe the Orbital Cavities. The orbits are 2 conoidal cavities, situated between the forehead and the face, their bases outwards, their apices pointing backwards, the lines of axial prolongation meeting at the sella turcica of the sphenoid bone. They contain the organs of vision with their appendages, and are each formed by 7 bones,—the frontal,¹ ethmoid,² sphenoid,³ 4 5 lachrymal,⁶ superior maxillary,⁷ palate,⁸ and malar,⁹ of which the first three are common to both orbits. Each orbit communicates with 1 cavity and 4 fossæ, as follows, viz.—

. *Cavity* of the cranium, by the optic foramen¹¹ and sphenoidal fissure.¹⁰

Fossæ (4)—the nasal, temporal, zygomatic, and sphenomaxillary,—by the nasal duct¹² and the sphenomaxillary fissure.¹³

What Foramina communicate with each orbit? Nine,—the optic foramen,¹¹ sphenoidal fissure,¹⁰ anterior²¹ and posterior²² ethmoidal foramina, supraorbital,¹⁴ infraorbital,¹⁵ and malar foramina,¹⁶ the nasal duct,¹² and the sphenomaxillary fissure.¹³

Describe the Roof of the Orbit. Formed by the orbital plate of the frontal bone anteriorly,¹ and the lesser wing of the sphenoid⁴ posteriorly, it is concave, and presents the—

Lachrymal Fossa,¹⁷ at its outer angle, for the lachrymal gland.

Depression,¹⁸ at the inner angle, for the pulley of the superior oblique.

Describe the Floor of the Orbit. Formed by the orbital surface of the superior maxillary bone,⁷ and the orbital process of the malar⁹ and palate bones,⁸ it is nearly flat and presents the—

Palato-maxillary Suture posteriorly.

Infraorbital Canal, and a *Depression* for the superior oblique muscle of the eye, anteriorly.

Infraorbital Groove,¹⁹ posteriorly.

FIG. 12.



Describe the Inner Wall of the Orbit. Formed by the nasal process of the superior maxillary bone,²⁰ the lachrymal,⁶ the os planum of the ethmoid,⁹ and the body of the sphenoid,³ it presents—

A Groove, for the lachrymal sac, and the *Lachrymal Crest*, anteriorly.

2 Sutures,—the ethmo-lachrymal, and the ethmo-sphenoidal.

Describe the Outer Wall of the Orbit. Formed by the orbital process of the malar bone,⁹ and the greater wing of the sphenoid,⁶ it presents the *Orifices*¹⁶ of the malar canals, and the *Spheno-malar Suture*.

Describe the Angles of the Orbit. They present the following points.

IN THE SUPERIOR EXTERNAL ANGLE.

Sphenoidal Fissure,¹⁰ or foramen lacerum anterius, transmits the 3d, 4th, ophthalmic division of the 5th, and the 6th nerves, the ophthalmic vein, branches of the lachrymal and middle meningeal arteries, filaments of the sympathetic nerve, and a process of the dura mater.

Articulations,—the fronto-malar, and fronto-sphenoidal.

IN THE SUPERIOR INTERNAL ANGLE.

Suture,—the lachrymo-ethmo-frontal, in which are the following foramina. *Anterior Ethmoidal Foramen*,²¹ transmitting the anterior ethmoidal artery and the nasal nerve.

Posterior Ethmoidal Foramen,²² transmitting the posterior ethmoidal artery and vein.

IN THE INFERIOR EXTERNAL ANGLE.

*Spheno-maxillary Fissure*¹³ (described under the *Zygomatic Fossa*).

IN THE INFERIOR INTERNAL ANGLE.

A Suture, the ethmo-maxillo-palato-lachrymal.

What other points are connected with the Orbit? Two, the supra-orbital notch, and the optic foramen, as follows, viz.—

Supraorbital Notch or Foramen,¹⁴ at the junction of the inner and middle thirds of the upper circumference, transmitting the supraorbital artery, veins, and nerve. A line prolonged from this notch through the interval between the bicuspid teeth of either jaw, will cross both the infraorbital and mental foramina, and the canine fossa of the superior maxillary bone.

Optic Foramen,¹¹ at the apex, is formed by the 2 roots of the lesser wing of the sphenoid, and transmits the optic nerve and the ophthalmic artery.

From around its margin arises a tendinous ring, the common origin of the 4 recti muscles of the eye.

What Muscles arise within the Orbit? The 4 recti and 2 oblique of the eye, the levator palpebræ, and the tensor tarsi (8 in all).

THE EYE.

[For an osteological description of the Orbit, see page 29.]

What is the Visual Apparatus? It comprises the eyeballs and their appendages, which collect the luminous impressions,—and the optic nerves, which convey these impressions to the brain.

Describe the Eyeball. It is a spherical organ, situated in the anterior part of the orbital cavity, on a cushion of connective tissue and fat, where it is retained by its muscles, the optic nerve, the conjunctiva, etc., and protected in front by the eyelids and eyebrows. Projecting from its anterior surface is the segment of a smaller, transparent sphere, the Cornea. The eyeball has the following—

Diameters,—Antero-posterior, about .95 inch,—Transverse, .92 inch,—Vertical, .90 inch,—in the adult.

Anterior Pole,—is the geometric centre of the cornea.

Posterior Pole,—is the geometric centre of the fundus

Optic Axis,—is an imaginary straight line connecting the poles.

Visual Axis,—an imaginary straight line from the yellow spot to the object, through the nodal point. It cuts the cornea above the optic axis, at an angle therewith of 3° to 7° , the *Visual Angle*.

Nodal Point,—the centre of curvature of the refracting surfaces.

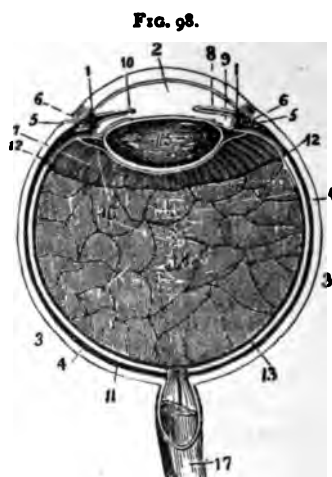
Equatorial Plane,—an imaginary plane through the centre of the eyeball, perpendicular to the axis, dividing the ball or globe into the anterior and posterior hemispheres. The *Equator* is the line where this plane cuts the surface of the globe.

Meridional Planes,—are imaginary planes coinciding with the axis of the eyeball. *Meridians* are the lines where these planes intersect the surface of the globe.

Describe the Tunica Vaginalis Oculi. It is a fibrous capsule, surrounding the eyeball and the intra-orbital portion of the optic nerve; arising from the optic foramen and being lost anteriorly on the sclerotic. It consists of two layers (parietal and visceral) enclosing a lymph-space which communicates with the lymph-space between the sclerotic and choroid coats. The tendons of the ocular muscles pierce it. The—

Capsule of Bonnet,—is the portion of tunica vaginalis posterior to the point where the tendons pass through it. This part is loosely attached to the eyeball, which rotates in it.

Capsule of Tenon,—is the portion of the tunica vaginalis anterior to the passage of the tendons. [The whole capsule or Tunica Vaginalis is by many anatomists named the Capsule of Tenon.]



Name the Tunics of the Eyeball.
They number 3, and are named as follows: the—

Sclerotic ³ and *Cornea*, ¹—the external and protective tunic.

Uveal Tract,—or vascular tunic, comprising the *Choroid*, ⁴ *Ciliary body* and the *Iris*, ⁵ within which is the—

Retina, ¹¹—the innermost, nervous tunic.

Name the Humors of the Eyeball.
They also number 3, as follows:—

Aqueous, ²—in the anterior ² and middle ⁹ chambers.

Crystalline,—forming the crystalline lens. ⁸

Vitreous, ¹⁰—in the posterior chamber of the eyeball. ..

THE SCLEROTIC AND CORNEA.

Describe the Sclerotic. The Sclerotic or hard coat is the posterior five-sixths of the external tunic of the eyeball, the anterior one-sixth being the Cornea. Externally it is of a white color, covered anteriorly by the conjunctival mucous membrane, posteriorly being continuous with the sheath of the optic nerve. Internally its color is brown, and its surface marked by grooves for the ciliary nerves. The optic nerve pierces it posteriorly, also the long and short ciliary arteries, posterior ciliary veins and short ciliary nerves. In the equatorial region it is pierced obliquely by the *venæ vorticosæ*, and around the corneal border by the anterior ciliary arteries and veins. It is composed of connective tissue with elastic fibres, intermixed with pigment cells, and cells resembling the corneal corpuscles. It presents for consideration the following points, viz.:—

Thickness,— $\frac{1}{15}$ inch posteriorly, $\frac{1}{80}$ inch anteriorly.

Lamina Fusca,—a layer of very fine connective tissue, connecting the sclerotic with the outer surface of the choroid.

Lamina Cribosa,—the posterior perforated portion of the sclerotic, which at this point is a thin, cribriform lamina. Its largest opening transmits the *arteria centralis retinae*, and is named the *Porus Opticus*, or Optic Canal.

Sub-conjunctival Tissue,—connects the conjunctiva with the outer surface of the sclerotic.

Sulcus,—a slight circular depression around the junction of the sclerotic with the cornea.

Arteries,—from the Ciliary, are few and in a coarse net-work, uniting at wide intervals, but forming, however, the—

Posterior Vascular Zone, or *Zone of Zinn*,—an arterial zone around the optic nerve entrance, formed by twigs of the short ciliary going to the optic nerve to anastomose with branches of the central artery of the retina, forming the only connection between the ciliary and retinal systems.

Anterior Vascular Zone,—around the cornea, formed by sub-conjunctival branches of anterior ciliary vessels.

Nerves,—none have been yet found in the sclerotic.

What is the Cornea? The Cornea, or horny body, is the anterior transparent projecting portion of the external tunic of the eyeball, forming about one-sixth thereof. It is set into the sclerotic as a watch-crystal into its case, is of ellipsoidal base, the transverse diameter being the longest, and slightly more convex vertically than horizontally. Its—

Thickness,—is $\frac{1}{8}$ inch at centre, $\frac{1}{12}$ inch at periphery.

Index of Refraction,—1.342.

Vessels,—none, except the peripheral zone, $\frac{1}{2}$ inch wide, formed of capillary loops from Episcleral branches of the anterior ciliary, which terminate at its circumference; so that it is practically a non-vascular structure.

Nerves,—are numerous; 20 or 30 twigs from the Ciliary nerves form an intricate plexus throughout its laminated substance.

Describe the Structure of the Cornea. It consists of five layers,—centrally the true corneal tissue, having in front an anterior elastic lamina and the conjunctival epithelium; behind, a posterior elastic lamina and the epithelial lining of the aqueous chamber. The—

Layer of Conjunctival Epithelium $\frac{1}{100}$ inch thick, consists of two or three layers of transparent nucleated cells.

Anterior Elastic Lamina, also named the *Anterior Limiting Layer*, the *Membrane of Bowman* or *Membrane of Reichert*,—is $\frac{1}{3000}$ to $\frac{1}{2000}$ inch thick, a firm, elastic and transparent homogeneous membrane, consisting of closely-interwoven fibrils, similar to those in the corneal tissue proper.

True Corneal Tissue,— $\frac{1}{5}$ inch thick, a transparent, fibrous structure, formed of five connective-tissue fibrillæ, united in bundles, and these in laminæ, between which is a semi-fluid cement, filled with *Corneal Corpuscles* and wandering cells.

Posterior Elastic Lamina, *Membrane of Descemet*, or *Demours*,—is, like the anterior elastic lamina, a structureless basement membrane, of extreme thinness, resisting the action of water, alcohol or acids; very brittle, ex-

ceedingly elastic, and curls up inwardly upon itself, when detached from the true cornea. At the corneal margin it breaks up into fibres, which are continuous with the ligamentum pectinatum of the iris.

Posterior Epithelial Layer,—a single layer of flattened, polygonal, transparent, nucleated cells, forming the endothelium of the membrane of Descemet or Demours, and the epithelial lining of the aqueous chamber.

THE UVEAL TRACT.

Describe the Choroid. It is the posterior portion of the middle tunic of the eyeball, $\frac{1}{80}$ to $\frac{1}{100}$ inch thick, and extends from the optic nerve entrance to the ora serrata, a little in front of the equator. It is highly vascular, of dark-brown color, connected to the sclerotic by the *Lamina Fusca*, terminates anteriorly in the *Ciliary Processes*, and is composed of four layers, as follows:—

Tunica Vasculosa,—externally, consists of the *venæ vorticosæ* and the larger arterial branches.

Membrana Ruyschiana, or Chorio-capillaris, the middle layer—consists of a fine capillary plexus, formed by the short ciliary vessels.

Limiting Membrane,—a structureless hyaline membrane, covering the inner surface of the capillary layer.

Pigmentary Layer, internally,—a single layer of hexagonal nucleated cells, loaded with pigment of a brown black color, which is absent in albinos, and of slight amount in blondes. [Considered by many anatomists the 10th layer of the retina.]

Arteries of the Choroid,—are the short posterior ciliary, and recurrent branches from the long posterior and anterior ciliary. (See p. 105.)

Veins,²—unite into 4 or 6 *Venæ Vorticosæ*,⁴ which pass out through the sclerotic near its equator.

Nerves,³—derived from 3d, 5th, and sympathetic, through the long and short ciliary nerves. (See p. 137.)

What are the Ciliary Processes? They are 70 or 80 folds, formed by the anterior prolongation of the middle and internal layers of the choroid on the inner surface of the ciliary muscle, being received into corresponding folds on the suspensory ligament of the lens. They are about $\frac{1}{8}$ inch in length, and form a curtain-like expansion behind the iris.

Describe the Ciliary Body.⁵ It is the portion of the uveal tract between the choroid and the iris,⁶ and consists of ciliary muscle covered by choroidal stroma and the ciliary processes. The—

Ciliary Muscle or Muscle of Bowman,—is a ring of involuntary muscular fibres, supplied by the 3d nerve; is thickest anteriorly, thin posteriorly.

Its fibres arise from the corneo-sclerotic junction, and pass backwards to

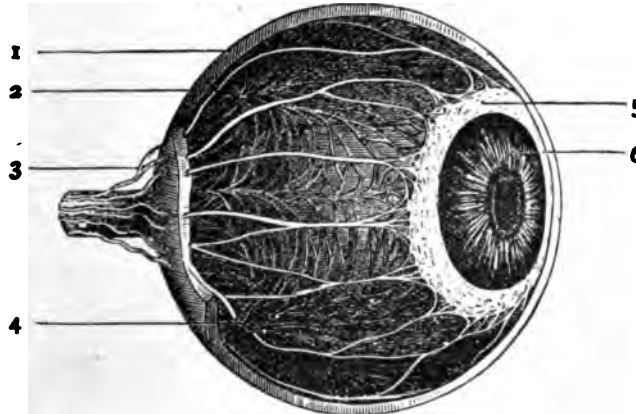
be attached to the choroid in front of the retina. Consists of meridional fibres drawing the choroid forwards, and circular fibres which relax the zonula and permit the lens to become more convex, from its own elasticity.

Annular Muscle of Müller,—consists of separate circular bundles at the anterior internal angle of the ciliary body.

Circulus Arteriosus Major and Minor,—are arterial circles on the ciliary muscle, formed by branches of the long posterior ciliary and anterior ciliary arteries.

What is the Iris? It is a perforated curtain, suspended in the aqueous humor behind the cornea and in front of the lens, and is the anterior portion of the middle tunic of the eyeball, being continuous with the ciliary muscle and the choroid coat. It is about $\frac{1}{4}$ inch wide, $\frac{1}{100}$ inch thick, and is com-

FIG. 99.



posed of radiating and circular muscular fibres, a fibrous stroma and pigment cells, covered by a layer of irregular cells continuous with those of the membrane of Descemet. The—

Pupil,—is the central opening in the iris, situated a little to the nasal side - of the centre, diameter $\frac{1}{8}$ to $\frac{1}{4}$ inch.

Ligamentum Pectinatum Iridis, or Dollinger's band,—is the suspensory ligament of the iris, connecting its ciliary margin with the corneo-sclerotic junction. It is formed of strong fibrous prolongations from the membrane of Descemet and the posterior surface of the cornea.

Fontana's Spaces,—are spaces between the prolongations which form the ligamentum pectinatum. In some animals, as the ox, they form regular canals.

- Uvea, or Tapetum*,—a layer of purple pigment-cells on the posterior surface of the iris, continuous with the pigment layer of the ciliary processes.
- Sphincter Pupilla*,—a layer of circular muscular fibres around the pupillary margin, supplied by the 3d nerve.
- Dilator Pupilla*,—radiating muscular fibres from the pupillary margin toward the ciliary border, supplied by fibres of the sympathetic, from the ciliary ganglion. [See p. 137.]
- Membrana Pupillaris*,—a vascular membrane which covers the pupil in the foetus, disappearing about the eighth month,—occasionally permanent. It is nourished by the *Hyaloid Artery*, through the *Canal of Stilling* (described under the VITREOUS HUMOR).
- Arteries*,—are derived from the long and anterior Ciliary, forming the *Circulus Major Iridis* at the ciliary border, and the *Circulus Arteriosus Iridis Minor* near the pupillary margin.
- Veins*,—empty into those of the ciliary processes and the anterior ciliary veins
- Sinus Circularis Iridis, Canal of Schlemm, or Canal of Fontana*,—is a minute canal at the internal corneo-sclerotic junction, extending around the circumference of the attached border of the iris. It is lined by endothelium and encloses a venous plexus, receiving veins from the sclerotic and the ciliary plexus. It communicates with the chamber of the aqueous humor and with the anterior ciliary veins.
- Nerves of the Iris*,—are derived from the 3d, 5th and the sympathetic, through the long and short ciliary nerves. The 3d supplies the circular fibres, the sympathetic the radiating ones, the 5th being nerves of common sensation.

THE RETINA.

What is the Retina? It is the innermost or nervous tunic of the eye,—a delicate, grayish, transparent membrane, about $\frac{1}{5}$ of an inch thick at the fundus, $\frac{1}{8}$ inch at the anterior margin. It is formed by a membranous expansion of the optic nerve elements, and extends from the termination of that nerve nearly as far forwards as the ciliary processes, terminating in a jagged margin, the *Ora Serrata*, though its fibrous stroma is continued as the *Pars Ciliaris Retinae* over the ciliary body. The Retina presents for examination the following points, viz., the—

- Macula Lutea, or Yellow Spot*,—situated on the retina, exactly in the visual axis; is an elevated oval spot where vision is very acute, the retina being very thin and full of nerve elements closely packed together at the expense of its connective tissue. No rods, no nerve-fibre layer here, but the cones and ganglion-cells are very numerous.
- Fovea Centralis*,—a depression at the centre of the macula lutea, $\frac{1}{12}$ to $\frac{1}{16}$ inch in diameter, in which the sense of vision is most acute.

Optic Disc or Papilla,—the point where the optic nerve enters, the central artery of the retina piercing its centre. It lies about $\frac{1}{8}$ inch internal to and $\frac{1}{4}$ inch below the posterior pole of the eye, and is often called the *Blind Spot*, being the only part of the fundus oculi from which the power of vision is absent.

Pars Ciliaris Retina,—the part of the retinal stroma which is prolonged over the ciliary body. It is destitute of nerve-elements.

Arteries of the Retina,—arise from the Arteria Centralis Retinae (br. of the ophthalmic), just behind the optic disc; run chiefly upwards and downwards, accompanied by veins, to terminate in capillary network. No vessels exist in the fovea centralis, and only the finest capillaries in the macula lutea.

Describe the Structure of the Retina. It is composed of nervous elements, blood-vessels, and modified connective tissue resembling the neuroglia of the brain, arranged in 9 or 10 layers, from within outwards, as follows, viz.—

Membrana Limitans Interna,—a perfectly transparent membrane, made up of the retinal connective tissue, and lining the inner surface of the retina (shown in the cut by the lowest line).

Optic Nerve Fibres,¹—composed of the terminal fibres of the optic nerve radiating from the papilla in all directions. They consist of the axis-cylinder only.

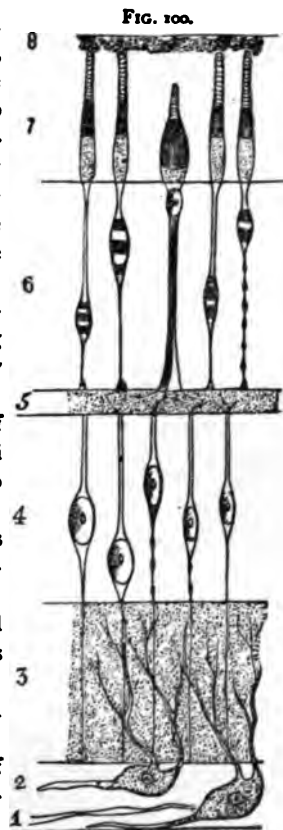
Ganglionic Layer,²—a very thin layer of large ganglion-cells, having large nuclei and nucleoli, with branching processes to the optic nerve fibres of next layer.

Internal Molecular Layer,³—fine granules intersected by finest nerve fibres and connective tissue elements.

Internal Granular Layer,⁴—small, round cells with large nuclei, their processes uniting with the ganglion cells.

External Molecular Layer,⁵—a very thin layer of fine granules and nerve-fibrillæ.

External Granular Layer,⁶—consists of ellipsoid cells, forming a nucleated enlargement of Jacob's membrane.



External Limiting Membrane,—a membranous expansion of radial connective tissue, perforated by foramina (shown in the cut by a line between ⁶ and ⁷).

Rods and Cones, or Jacob's Membrane,⁷—the perceptive layer of the retina, composed of rods and cones closely packed together, like palisades, the termini, probably, of the optic nerve fibres.

[A tenth layer is described by some anatomists, the pigmentary layer of the choroid.⁸ See *ante*, p. 200.]

Name the Essential Elements of the Retinal Structure.

PRINCIPAL ELEMENTS, are three, as follows, viz.—

Nerve fibres,—which in the molecular layers break up into very delicate plexuses. In their course are found—

Nerve-cells,—ordinary bipolar or multipolar, and modified ones, the so-called granular layers of the retina.

Terminal Organs,—the rods and cones of Jacob.

SUBORDINATE ELEMENTS, are two, the—

Modified Connective Tissue,—of spongy nature.

Vessels,—blood-vessels and lymphatics.

THE HUMORS.

What is the Aqueous Humor? It is a clear, alkaline, serous fluid, composed of water 96.7, albumen 0.1, chloride of sodium and extractive matters 3.2, weighing 4 to 5 grains, and filling the anterior and posterior aqueous chambers, which communicate with each other when the pupil is dilated sufficiently to remove the pupillary margin of the iris from the surface of the lens. The—

Anterior Chamber of the Aqueous Humor,—has the cornea in front and the iris behind.

Posterior Chamber of the Aqueous Humor,—has the iris in front, the lens, zonula and ciliary body behind. [The existence of any such space is denied by many authorities.]

Describe the Crystalline Lens. It is a bi-convex, elastic, transparent body, enclosed in a capsule, held in place by a suspensory ligament, and situated between the posterior aqueous chamber and the chamber of the vitreous humor, immediately behind the pupil. Its posterior surface is the most convex, and rests in the *Hyaloid Fossa* of the vitreous. Its—

Dimensions and Weight,—diameter, about $\frac{3}{8}$ inch,—axis about $\frac{1}{2}$ inch,—weight, 4 to $4\frac{1}{2}$ grains,—index of refraction, 1.44.

Composition—water 60, soluble albuminous matter 35, insoluble albuminous matter 2.5, fat and cholesterine 2 per cent.

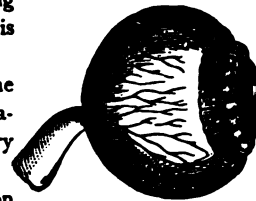
Capsule.—is transparent, elastic, $\frac{1}{8000}$ inch thick anteriorly, $\frac{1}{4000}$ inch posteriorly; has a layer of flat cells between its anterior portion and the lens, which, after death, break down into a fluid, the *Liquor Morgagni*.

Zonula of Zinn, or Suspensory Ligament.—connects the capsule with the ciliary body. It is formed by a splitting of the hyaloid membrane into two layers, one going in front of the lens, the other behind. It is shown exaggerated in the cut.

Canal of Petit.—is a triangular space around the circumference of the lens, formed by the separation of the two portions of the suspensory ligament (shown inflated in the cut).

Processus Zonulae.—are small radiating folds on the anterior surface of the suspensory ligament, which are received between the ciliary processes.

FIG. 101.



Describe the Structure of the Crystalline Lens. It consists of flattened hexagonal fibres, united laterally into lamellæ, by serrated edges, and curving around the borders of the organ. Its centre or *Nucleus* is unstratified, and denser than the surrounding portion or *Cortex*. It is unorganized, having no vessels or nerves, but receives its nutriment by imbibition from the uveal tract, and possibly from the other humors of the eye.

What is the Vitreous Humor? The Vitreous Humor or Hyaloid Body is an apparently structureless substance, of gelatinous consistence, consisting of water with a little albumen and salts, and containing cells, nuclei, and connective-tissue filaments. It has no vessels or nerves, and is situated in the posterior chamber of the eye, behind the lens, which it supports, as also the retina. The—

Canal of Stilling, Canal of Cloquet, or Hyaloid Canal.—traverses the vitreous humor antero-posteriorly, being the channel for the transmission in the fœtus of the *Hyaloid Artery* to the *membrana pupillaris*. [See *ante*, p. 202.]

Hyaloid Fossa.—a depression on the anterior surface of the vitreous, receiving the posterior convexity of the lens.

What is the Hyaloid Membrane? It is a delicate capsule investing the vitreous, and supposed to send delicate septa into the substance of that humor. It divides anteriorly into two layers, which enclose the Canal of Petit and the Lens, forming the suspensory ligament of the latter, or *Zonula of Zinn*. [See above.]

The foregoing is the view of most anatomists, but some assert that this membrane is identical with the internal limiting membrane of the retina, extending only to the *ora serrata*. [Henle, Iwanoff, etc.]

Others admit a hyaloid membrane surrounding the vitreous, but deny that it splits to enclose the lens, and assign but one layer to the suspensory ligament, namely, that in front of the Canal of Petit. [Gray, etc.]

Describe the Muscles of the Eyeball. They number 6, of which 4 are Recti and 2 Oblique, as follows:—

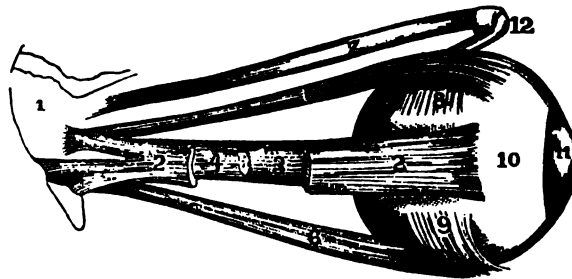
Rectus Superior,⁵—from the upper margin of the optic foramen and the sheath of the optic nerve,—into the sclerotic coat. *Action*, to rotate the eyeball upwards. *Nerve*, 3d cranial.

Rectus Inferior,⁶—from the ligament of Zinn,—into the sclerotic coat. *Action*, rotates the eyeball downwards. *Nerve*, 3d cranial.

Rectus Internus,⁴—from the ligament of Zinn,—into the sclerotic coat. *Action*, rotates the eyeball inwards. *Nerve*, 3d cranial.

Rectus Externus,²—by two heads, the upper from the outer margin of the optic foramen, the lower from the ligament of Zinn and a bony process

FIG. 102.



at lower margin of the sphenoidal fissure,—into the sclerotic coat.¹⁰ *Action*, to rotate the eyeball outwards. *Nerve*, 6th cranial, or abducens. Between the two heads of the external rectus pass the 3d, nasal branch of the 5th, and the 6th cranial nerves, and the ophthalmic vein.

Obliquus Superior,⁷—from about a line above the inner margin of the optic foramen, its tendon passing through a “pulley”¹² near the internal angular process of the frontal bone and thence beneath the rectus superior,—into the sclerotic coat, at right angles⁸ to the insertion of the rectus superior. *Action*, to rotate the eyeball on its antero-posterior axis. *Nerve*, 4th cranial, or patheticus.

Obliquus Inferior,⁹—from the orbital plate of the superior maxillary,—into the sclerotic coat below the insertion of the external rectus and at right angles thereto. *Action*, to rotate the eye on its antero-posterior axis. *Nerve*, 3d cranial.

VESSELS AND NERVES OF THE EYE.

What Nerves supply the Muscles of the Eye? The—

3d Cranial, or Motor Oculi,—supplies the superior, inferior and internal recti, and the inferior oblique muscles.

4th Cranial, or Trochlear,—supplies the superior oblique muscle.

6th Cranial, or Abducens,—supplies the external rectus.

Describe the Arteries of the Eye. The Eye is supplied by the *Ophthalmic* and *Anterior Cerebral* branches of the internal carotid artery, and the *Infra-orbital* branch of the internal maxillary (from the external carotid). The—

OPHTHALMIC,—arises from the cavernous portion of the Internal Carotid, and enters the optic foramen, giving off the following-named branches:—

Lachrymal,—to the lachrymal gland, the upper eyelid, and the conjunctiva, anastomosing with the palpebral arteries.

Supra-orbital,—supplies the superior rectus and levator palpebræ muscles, the forehead and pericranial tissues.

Anterior and Posterior Ethmoidal,—to the dura mater, the nose, the anterior ethmoidal cells, and the frontal sinus.

Palpebral,—superior and inferior,—to the eyelids.

Frontal,—to the tissues of the forehead.

Nasal,—to the lachrymal sac, and the nose.

Short Ciliary, 12 or 15,—pierce the sclerotic at the lamina cribosa, supplying the choroid and the ciliary processes.

Long Ciliary, 2,—pierce the sclerotic, and pass forwards between it and the choroid, to supply the iris, forming two arterial circles thereon, the *Circulus Major Iridis* at the ciliary border, and the *Circulus Arteriosus Iridis Minor* near the pupillary margin.

Anterior Ciliary,—arise from the muscular branches, pierce the sclerotic, and join the great arterial circle of the iris.

Arteria Centralis Retinae,—pierces the optic nerve obliquely, and is distributed to the retina.

Muscular Branches, 2,—superior and inferior, supply the muscles of the eyeball.

ANTERIOR CEREBRAL, branch of the Internal Carotid,—sends nutrient capillaries to the optic nerve.

INFRA-ORBITAL, branch of the Internal Maxillary artery,—sends branches to the inferior rectus and inferior oblique muscles, and to the lachrymal gland.

Name the Principal Lymph-spaces of the Eyeball. The—

Canal of Schlemm,—around the circumference of the iris.

Peri-choroidal Space,—between the choroid and the sclerotic.

Space of Tenon,—between the globe and its capsule.

Vaginal Spaces,—between the sheaths of the optic nerve.

What Veins has the Eye? It has two main trunks, the *Superior* and *Inferior Ophthalmic Veins*, which empty into the cavernous sinus, after collecting the blood from the smaller venous channels through the *Vena Vorticosa* of the choroid. The veins of the eye anastomose freely with the facial veins, thus permitting the escape of venous blood in either direction.

Describe the Nerves of the Eye. They are the—
Nerve of Special Sense,—the Optic, or 2d cranial nerve.

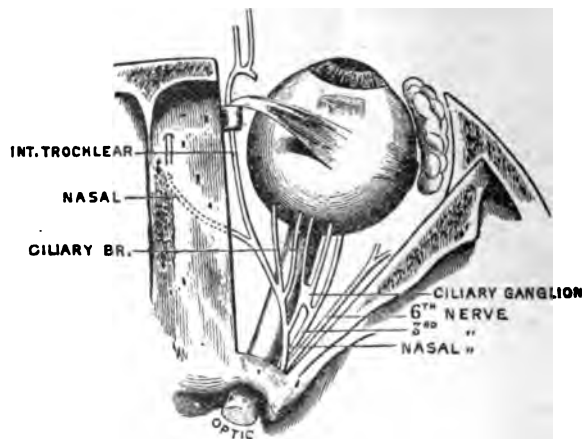
Motor Nerves,—the 3d, 4th, 6th, filaments of the 5th, and some fibres from the sympathetic.

Sensory Nerve,—the Ophthalmic Division of the 5th, giving off the—

Lachrymal,—to the lachrymal gland, the conjunctiva, and the integument of the upper eyelid.

<i>Frontal</i> ,	{	Supra-trochlear.	<i>Nasal</i> .	{	Ganglionic.
		Supra-orbital.			Long Ciliary.
					Infra-trochlear.

FIG. 103.



Sympathetic Branches,—arise from the medulla, cilio-spinal region, cavernous and carotid plexuses, and join the 3d, 4th, 5th, and 6th nerves, sending filaments to the dilator fibres of the iris, to the muscles of the orbit and lids, to the ciliary ganglion, and to the walls of the arteries.

Short Ciliary,—some 20 in number, arise from the *Ciliary Ganglion* [See *ante*, page 137], pierce the sclerotic and go to the ciliary muscle, choroid, iris, cornea, and to the sheath of the optic nerve.

Ascending,—from Meckel's ganglion [See *ante*, page 137], enter the orbit by the sphenomaxillary fissure, going to the optic nerve, the 6th nerve, and the ciliary ganglion.

Describe the formation and course of the Optic Tract. The fibres which form the optic tract have their deep origin in the optic thalamus, corpora geniculata, and the anterior corpora quadrigemina. The tract winds around the crus cerebri as a flattened band, receiving from the crus a few fibres of attachment, and also fibres from the lamina cinerea and the tuber cinereum. In front of the latter body the two tracts join to form the *Optic Commissure* or *Chiasm*. [See ² on Fig. 61, page 130.]

What is the arrangement of the Fibres in the Optic Commissure? As generally described, the fibres undergo a partial decussation, as follows, viz., the—

Decussating Fibres,—are the most numerous. They lie in the centre of the commissure, and pass across to the opposite side, connecting the retina of each eye with the opposite cerebral hemisphere.

Longitudinal Fibres,—are the external fibres in the optic tracts, passing into the optic nerve of the same side, connecting each retina with the cerebral hemisphere of its own side.

Inter-cerebral Fibres,—situated posteriorly in the commissure, passing from one optic tract to the other.

Inter-retinal Fibres,—lie anteriorly in the commissure, passing from one optic nerve to the other, and connecting the retina of one eye with that of the other.

Describe the Optic Nerve. The Optic Nerve proper is the 2d cranial nerve, arises from the optic commissure, passes into the orbit by the optic foramen in company with the ophthalmic artery, is pierced by the central artery of the retina, and enters the eyeball posteriorly $\frac{1}{16}$ inch inwardly from its axis, piercing the sclerotic and choroid coats, and finally expanding in the retina. It is surrounded by a tubular process of dura mater, which as the nerve enters the orbit, subdivides to form both the sheath of the nerve and the periosteum of the orbit.

APPENDAGES OF THE EYE.

What are the Tutamina Oculi? They are the appendages of the eye, including the—

Eyebrows, or Supercilia.

Lachrymal Gland, and Ducts.

Eyelids, or Palpebræ.

Lachrymal Sac.

Conjunctiva, or lining membrane.

Nasal Duct.

What are the Eyebrows? They are arched elevations of the integument over the supra-orbital arches, are covered with a row of short hairs, and are drawn downwards and inwards by the *Corrugator Supercilii* muscle. [See page 68.]

Describe the Eyelids. The Palpebræ, or Eyelids, are two thin, movable folds, placed in front of the eye, for its protection. The upper lid is the most movable one, having its own levator muscle, the *Levator palpebræ superioris*. [See page 68.] The—

Palpebral Fissure,—is the space between their free margins, its outer and inner angles being termed respectively the *External Canthus* and *Internal Canthus*.

Lacus Lachrymalis,—is a small triangular space at the internal canthus, between the lids and the globe.

Lachrymal Papilla,—on the edge of each lid, about $\frac{1}{4}$ inch from the internal canthus.

Punctum Lachrymale,—a minute orifice on each papilla, and the beginning of the lachrymal canal.

Describe the Structure of the Eyelids. They are composed externally of skin, internally of mucous membrane (the palpebral conjunctiva), and between these lie areolar tissue, the orbicularis muscle, tarsal cartilage, fibrous membrane, Meibomian glands, vessels and nerves. The—

Orbicularis Palpebrarum Muscle,—is very thin and pale. [See p. 68.]

Tensor Tarsi, or *Horner's Muscle*, [See p. 68]—is a portion of the orbicularis, compressing the punctum and the sac.

Tarsal Cartilages,—are plates of fibro-cartilage, forming the framework of the lids. The upper one is crescentic in shape, the lower one elliptical and smaller.

Tarsal Ligaments,—are fasciæ connecting the tarsal cartilages to the circumference of the orbit. Externally they connect with the malar bone, and are there called the *External Canthal Ligaments*.

FIG. 104.



Tendo Oculi,—connects the inner end of each tarsal cartilage to the nasal process of the superior maxillary bone.

Meibomian Glands,¹—are sebaceous glands imbedded in the tarsal cartilages, 30 to 40 in the upper lid, 20 to 30 in the lower one. They open along the inner edge of the free border of each lid, and furnish a sebaceous secretion, to prevent adhesion of the lids to each other.

Eyelashes, or Cilia,—are a double or triple row of short hairs, situated on the free margins of the lids; their follicles lying in the connective tissue beneath the tarsal cartilages.

Arteries,—are the *Palpebral* branches of the ophthalmic artery, forming the *Superior and Inferior Tarsal Arches*, and anastomosing with the angular, anterior temporal, lachrymal and transverse facial.

Nerves,—the 3d, facial and sympathetic to the muscles; the 5th to the skin and conjunctiva.

What is the Conjunctiva? It is the mucous membrane which lines the eyelids, and is reflected over the front of the sclerotic and cornea. It is continuous with the mucous lining of the Meibomian glands, canaliculi, lachrymal sac, nasal duct, lachrymal duct and gland. The—

Palpebral Conjunctiva,—consists of connective tissue covered by epithelium, is traversed by furrows, and has papillæ and follicular glands.

Ocular Conjunctiva,—is very thin and transparent, loosely attached on the sclerotic, firmly adherent over the cornea, where it has no vessels in its structure. It has very few papillæ, and no glands.

Retro-tarsal or Palpebral Folds,—superior and inferior,—are where the conjunctiva is reflected over the globe. They contain prominent papillæ, and conglomerate glands, called the accessory lachrymal glands.

Plica Semilunaris, or Semi-lunar Folds,—a crescentic fold of conjunctiva at the inner canthus, considered to be the rudiment of the *Membrana Nictitans* or 3d eyelid (of birds).

What is the Caruncula Lachrymalis? It is a small, red, conical body, situated in the lacus lachrymalis, at the inner canthus of the eye; consisting of hair follicles and sebaceous glands, and covered by conjunctiva. It is connected by tendinous fibres to the capsule of Tenon and to the rectus internus muscle.

Name the parts constituting the Lachrymal Apparatus. They are the lachrymal gland and its ducts, the accessory conjunctival glands, the canaliculi, lachrymal sac, and nasal duct.

Describe the Lachrymal Gland. It is an oval gland situated in a fossa of the orbital portion of the frontal bone, at the outer angle of the orbit, its inferior surface resting on the eyeball, its lower margin or lobe being covered by conjunctiva. The—

Tarso-orbital Fascia,—connects the lachrymal gland to the bony roof of the orbit.

Ducts,—6 to 12 in number; open on the upper and outer portion of the palpebral conjunctiva.

Secretion—(tears),—lubricates the anterior surface of the eyeball. Excess

FIG. 105.



evaporates, or collects in lacus and passes through puncta into canaliculi, and so to lachrymal sac, and thence, by the nasal duct, into the inferior meatus of the nose.

What are the Canaliculi? They are two minute canals, $\frac{1}{15}$ inch in diameter and $\frac{1}{2}$ inch long, which extend from the punctum in each lid to the lachrymal sac. They are lined with mucous membrane, and enveloped by fibres of the tensor tarsi muscle.

Describe the Lachrymal Sac. It is the superior dilated extremity of the nasal duct, and is situated in the groove formed by the lachrymal bone and the nasal process of the superior maxillary. Its form is oval, flattened antero-posteriorly; its dimensions about $\frac{3}{4}$ inch long and $\frac{1}{4}$ inch wide. Its fundus is crossed by the tarsal ligament, and by the tensor tarsi muscle. Its junction with the nasal duct may be interrupted by folds of the lining mucous membrane.

What is the Nasal Duct? A membranous canal extending from the lachrymal sac to the inferior meatus of the nose. It is about $\frac{1}{4}$ inch long, $\frac{1}{8}$ inch in diameter, is contained in the osseous lachrymal canal, curving downwards, backwards and outwards, and its calibre is narrowest about its middle. Its mucous lining is thick, and continuous with the Schneiderian membrane of the nasal cavity. Surrounding it is a vascular network of connective tissue, and outside this, a tendinous sheath. At its lower end a fold of mucous membrane forms an imperfect valve.



PART II.

OPHTHALMIC DEPARTMENT.

While much might be said concerning the methods used to fit the eyes with glasses, we are not attempting to rehash old ideas nor approve nor denounce them; we simply aim to give to the reader the method of finding the nerve strain which conduces to the production of the functional disorders, so prevalent in the present day among the vast majority of the people. The mere test for vision, any optician can do that; and so can most of the jewelers and the oculists; but none of them have learned how to find the amount of nerve strain, causing so much human misery and so much so-called disease, and for this reason alone what we shall say and the instructions given in this chapter will be worth a thousand times the cost of this book, and may be absolutely relied upon as true. Any half-way observance will not be satisfactory, and we urgently enjoin strict adherence to the instructions herein detailed, and then results will follow as stated in every case where the limit angle has not been passed.

CONTROL OF DISEASE.

All are interested in this. It is a fact that all diseases are due to nerve waste, and we being absolutely controlled through the nervous system, and through them our every thought is transmitted, it becomes a matter of first importance to preserve the nervous system.

The nerve waste is a result of using up of the elements of which the nerves are composed. This is done by the uses imposed

upon the nerves themselves — the work done through them and by them. The nerve strain, then, means overused. Overuse results in exhaustion, and this results in what is denominated disease. Disease anywhere in the body is a result of loss of nerve power. It may be overuse of the eyes, the spine, or any other part of the system, and thereby produce exhaustion, a general weakness, and thus furnish sufficient cause for disease.

It therefore becomes evident that, to arrest disease and keep well, it is absolutely a matter of the first importance to arrest, stop, the waste of nerve power. To cure any disease, give the nervous system rest, and allow it to recuperate the lost power, as the loss of power is the cause of the diseases complained of, whatever they may be, or where located in the body. Just as soon as the nerve waste is stopped and the nerve pressure is removed, nature has an opportunity to resume her accustomed course, so that harmony, health, becomes established.

We have a method, or methods, by which we stop the waste, the leakage, and remove the strain, and that, too, without drugs, and all sorts of functional disturbances, recognized as diseases, get well. This is no experiment; it is an absolute fact. We positively measure the nerve power, and know just how much an individual is losing every second of wakeful hours, and place the diseased individual in a way to get well. There is no guessing at results. They will be as stated. Headache, indigestion, constipation and all other complaints yield immediately to this treatment.

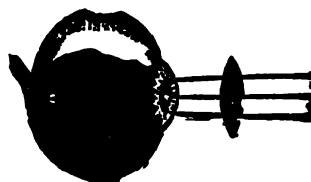
We need not stop to argue this question, for we have been through all the pathies of this country to qualify for the effectual treatment of diseases, and claim to be skilled in the science of healing, having eliminated all superfluous measures, medicines and foreign substances not needed in the treatment of any disease known to humanity. We have simply reduced the practice to the simplest possible measure which will do the business, and not tax the system with what is absolutely unnecessary. The hardest thing we have to do is to convince the afflicted that they do not need medicine, and many will not take our treatment because we do not advise them to take medicine. The habit is so fixed in the

mind of the afflicted, and the majority of people believe that it is essential to take medicine to get well, that the "science" of doctors, and gulp down their stuff for every complaint they have, and they are the ones who are sick the most. When we give the attention of the afflicted, we convince them that medicine is not needed.

There are four and one-third nerves which come from the brain said to end in and around the eyes (nerve leashes are always in pairs), and these produce all the phenomena of motion, sensation and sympathy necessary to the performance of all the functions of the eye. The superior internal and inferior recti muscles, as well as the inferior oblique muscles, are said to be controlled by the motor "branch" of the third nerve; the external recti muscle has for its control the sixth nerve, and the superior oblique muscle is controlled by the fourth nerve; and it is said that the third nerve controls the *musculus iris*, and regulates the size of the pupil and the amount of light admitted into the eyes. The use, the labor of the nervous system determines the muscular expression or capacity of the muscle in which the nerve or nerves end. The nerves are, therefore, measured according to what they manifest in muscular power, and this we determine by actual measurement and express it in diopters.

The standard of nerve power is called emmetropia, or at the age of twenty years power to read Snellen's test card distinctly, the 20-20 letters at twenty feet from the chart, and if the sight is stronger or weaker, we determine that by the excessive or the diminutive variation above or below that standard. If one reads, say, 15-20, his vision is weak, and if one reads 20-15, we say his accommodation is strong, increased. This latter condition is what we are especially concerned in as regards the status of our patients, for if the eye sees better than an emmetrope, we at once conclude that a degree of hyperopia exists, and this indicates that the patient is straining the accommodation; that is, the nervous system which regulates the action of the ciliary body is irritated, and doing more than a normal share of work, and the number of diopters determines the measure of the nerve strain going on all

the wakeful hours, and it is our province to stop this strain, and thus prevent nerve waste, and thus cure our case of any ailment.



THE NATURAL EYE (EMMETROPIC).

The afflicted should, first of all things, have the nervous system of their eyes examined by an ophthalmologist — the error of refraction corrected, and the spinal-nervous system properly adjusted, harmonized with itself.

THE HUMAN EYE.

Could we arrange in words a description of this wonderful structure, all that thought could suggest, that mind's imagination could picture, and present in panoramic perspective all that this wonderful organ is capable of compassing, many volumes would be required, and then it would be only indexed. Of all the five senses, this embraces the most. Its normal functional capacity is beyond the ken of mortals to express. Through it we arouse to activity all the faculties of the brain; bring to mind all that nature has so beautifully spread out before us, (and it has spread the pathway with every form, size, and shape, color and shade that imagination can conceive,) and the mind can at once read expressions, and almost see the thoughts of the things expressed in the face of his brother man. Joy, sorrow, anger, happiness, and all the ideas expressed by the synonyms of these words, are detected by the intelligent gaze into the other's eyes and countenance; and whether that one speaks our vernacular, or is born far away and possesses the habits of a heathen, there is detected in that face or eye characteristics readily discernible, in truth and verity.

This wonderful organ is under the supervision of no less than four and a third leashes or bundles of nerves, and they are the second, third, fourth, sixth, and the third division, or ophthalmic division, of the fifth cranial nervous system.

The second nerve is called the optic nerve, and forms all of the retina, and it is the nerve of sight. The third one is the nerve of motion, and controls the action of the pupil of the eye through its influence upon the ciliary muscles which surround the pupil, and as the light influences the retina, the third nerve filaments regulate just the amount necessary at the time to form an image of the object the mind wishes to see, form, or that is seen by the eyes. The muscles attached to the outside covering of the eyes are for the purpose of holding the eyes in fixed conditions, and changing those positions whenever necessary to present the pupils in relation with the objects to be seen, and these muscles are controlled by nerves ending in them, which are the conductors of mind and thought conductors, and the motions take place according to the will of the individual. And the third cranial nerve filaments control the superior recti, inferior recti, the internal recti and the inferior oblique muscles, and the fourth nerve filaments are said to control the superior oblique, and the sixth nerve is distributed in the external recti muscle; so that, in the motions of the eyes, these various nerve filaments, distributed as stated, have to do with their various actions; and the third division of the fifth nerve filaments are distributed to the sides of the nose, to the eyelids, and side of face and teeth.

The anatomical description of the above, and all other nerves in the body, seems to be vague and confusing to the individual who thinks, for one nerve can not affect any muscle only where it ends, and as a filament only has one ending, in a muscle, it can only affect it where it ends. There are numerous filaments in one sheath of nerves, and some of these filaments go to entirely different muscles, and perhaps in remote parts of the body; so that the order of naming the cranial nerves is very confusing, to say the least of them. Nerves originating in one of the faculties of the brain may be distributed to various muscles in the body remotely situated.

The relationship of the various parts of the body is the result of arrangement of the various filamentous structure of the nervous system. As all nerves begin within the cranium and end throughout the body, the terminals being connected in such a way as to form a connection of at least two other endings, when a thought

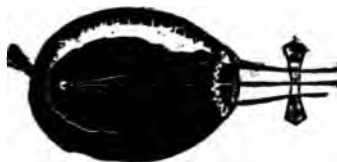
is sent through any one of these, it influences other two endings, motor and sensory, and the communication is returned to the brain, and the order is directed to the execution of the thing needed in that part, and thus we have a direct, intelligent connection between the brain and every part of the body. We thus demonstrate the absolute certainty of a mental communication throughout every tissue and to every atomic cell in the entire body; and therefore, in a normal condition, there is no disturbance or inharmony anywhere in the great house that mind built and cares for. Whenever these communicating lines are incapacitated in any way to perform their wonted functions, confusion ensues; we have a condition we denominate disease.

When it is considered that the eye is endowed with the faculty of expressing one of the five senses, its importance can be but faintly expressed in language. As to this organ a larger part of the happiness of this world is due, it will be of great interest, as well as instructive, to consider the things which particularly concern us in our investigation of this most wonderful of all the organs of the body. To see is a natural process, and so is the growth of the vegetable world; but there is a law regulating sight as well as growth. Without light there would be no sight, in fact, no eyes, for an eye would be in vain were it not for light. And inasmuch as there is light and there are eyes, the mechanism of the eye will first engage our attention. Light emanating from the sun, and coming therefrom with a velocity of twelve million miles per minute, and filling this side of our world for long hours in the twenty-four, its benefits can not be told; but to us it would afford no satisfaction, so far as seeing is concerned, if we had no eyes — no natural eyes — for not one of all the objects on the land would be observed, and we would go through this beautiful world groping in the dark, feeling our way. Without pursuing this part of the subject further, we assume that the reader has already grasped the importance of, and the necessity of, having eyes to see with.

The mechanism of the eyes is not naturally made in the form of a geometrical instrument adaptable for focusing rays of light, as a sphere is, but in the make-up of this organ there are certain

organic structures which are controlled by the nervous system, ending in certain muscles, the ciliary, which regulate the introduction of light, and so control the rays of light admitted that the rays are focused upon that delicate substance called the retina, that impressions of the objects are photographed thereon, and the brain takes cognizance of them, and we know the form, and size, and color, and the properties of all objects seen, so that the endless and innumerable variety of objects beheld are recognized and pictured upon the tablets of our memory, and become fixed thereon. This grows upon us so gradually that we scarcely ever think of the wonderfulness of the phenomena, or the untold pleasure which the vision has strewn along our pathway, and some only have the slightest conception of its beneficence, for they never think of the wisdom and power of the One who made the eye. The one born blind never realized what sight was until he was made to see by miraculous power. (By the way, all things out of the ordinary, to us, are miracles — above known law.)

Sight, then, is a product, dependent upon light and an organ to perceive it, and a sense of knowing it, when it is, where it is, and that it really exists. All this results from the two expressions, light, and the faculty of perception. The apparatus which controls the amount of light admitted into the eyes is the thing which concerns us individually, for the nerves which control the quantity of light from the various angles affect our physical being as regards health, and this is the theme which personally interests us as human beings.



MYOPIC EYE STRAINED.

Nerve strain of the eyes causes all functional diseases. Have you headaches? Eye strain is the producing factor. Dyspepsia comes from eye strain. Sour stomach, indigestion, cross eyes, sore and inflamed eyes result from eye strain. Fits, chorea, leu-

corrhea, female disorders, painful menstruation, constipation, piles, liver and kidney troubles, all are the legitimate results of nerve strain, and generally can be traced to the eyes. The facts are, all functional disturbances are the legitimate result of nerve strain. The Ophthalmologist knows how to take off the strain, "stop the leak," and "fill the tank," so that nature is free to perform her natural functions.

The above and all other complaints are amenable to Ophthalmology and Neuropathy.

The eye is the most delicate, and yet capable of performing more labor, than any organ in the body. It suffers more abuse with less complaint, and shows least signs of distress, and keeps up under the extraordinary task it performs, than any other organ in the body. This may be in part accounted for on account of its superabundance of nerve supply; it has no less than four and one-third cranial nerves ending in and supplying it. That nerve power is expended in proportion to its exercise or use is a well established fact, needing no proof from us. The overuse of the eyes makes extraordinary drafts upon the nervous system, exhausting the nerves used, thereby decreasing the power not only of the nerves actually used, but through sympathy, correlation of elements, taxes the other nerves all through the whole body as well.

This is the reason that we have disease. The use of any leash or set of filaments beyond a certain point reduces the power, and if constantly kept up, there will, sooner or later, be a lack of force to perform the functions required, to perform the normal functions, and then there is a corresponding weakness, shown by measurement, in all the nervous system in the body, and we find that some functional disturbance manifests itself in some part of the body we denominate disease, whether it be headache, or even the failure of the digestive organs in performing their functions, and we have what is called indigestion; perhaps inactive natural movements of the bowels may be from undue contraction of some of the muscular system, and as a result pain somewhere, generally in the organs supplied with sphincter muscles, and these may cause intense pain, and finally entire loss of function of the organ involved. This is only an index of the many conditions which are

traceable to this one cause. The various diseases to which we are subject, and we might say all functional disorders, have their origin in nerve waste, nerve exhaustion. We have often verified this conclusion by instituting measures to take off the strain, stopping the leakage which produces the exhaustion, the waste of nerve power, and shown by actual demonstration, restoring the individual to health just by placing upon his eyes the proper correction and stopping the leakage of nerve power. The man who prescribes glasses without knowing the relationship of the nerves of the eye to human ills is unworthy of confidence, and should not be trusted. Glasses improperly fitted are worse than useless—harmful. Oculists and opticians who prescribe lenses simply to see through know nothing of the causes of human ills, and should be shunned as dangerous. The true Ophthalmologist knows the anatomy of the eyes, their defects, and their relation to human ills, and are worthy of consideration. All functional diseases promptly yield to the treatment which stops the nerve waste, and fills the deficit by proper diet and correct habits. Any system which can not be proven correct is not scientific nor true. If medicine cured disease, from whence came the chronics everywhere to be seen, in every community, in every family, and at all times showing themselves as spectral ghosts, with sepulchral warnings of impending dissolution? It does seem as if suffering humanity would learn to doubt the curative effects of medicine, and investigate a rational system of treatment, which removes the causes of disease, and let nature heal.

THE CAUSE OF DISEASE IS INHARMONY.

The cause of inharmony is either nerve strain or nerve impingement, nerve pressure, and when either condition exists, nature is out of harmony with itself, and will not perform normal functions until that obstruction is removed, whether it be overuse of the nervous system or pressure upon nerves, interfering with their natural functions.

That all of the various functions of the body are carried on through the nerves is a well settled fact among intelligent anat-

omists and physiologists, and that various methods have been devised to free impinged nerves is patent, and have done something, accomplished some things along that line, yet it is a fact that it has accomplished but little, and has had its limits because of inadequacy in method and painful in application, and has had its day, and by many relegated to the arcana as incompatible with the necessities demanded. Never in all the history of the ages has a complete method of treatment been devised until the methods of removing nerve pressure and nerve strain had been combined and correctly applied, simply from the fact that nerve strain and nerve pressure are from different causes, and one was inadequate to accomplish the entire results necessary to be accomplished.

Having studied all the methods known, we feel somewhat inclined to assume, to know, that we know whereof we affirm, and not only feel competent to apply this science correctly and to the complete satisfaction of the afflicted, but to demonstrate it theoretically to the most skeptical, and show the reasons therefor along anatomical and physiological lines. We court investigation and the closest criticism, for whatever can not be demonstrated is not scientific nor true.

A SPECIAL TREATMENT FOR SENILE AND CAPSULAR CATARACT.

Give the treatment at the eighth dorsal vertebra once a day for all cases of cataract. The other treatment mentioned in this book—such as thumping the eyeball with the thumb against the side of the eyeball, on the nail—is also a good remedy to shake up the tissues. The far-reaching effects of neuropathy are wonderful, and as yet just a little known. When we shall have learned the varied and exact functions of the nervous system, then we shall know more of the effects of neuropathic treatment, and the cure of disease thereby. The world will then realize that “the proper study of mankind is man.”

The comprehension of mankind in all of his parts, soul, body and spirit—with all of his combined faculty influences—embrace everything that pertains to this life and that which is to come. Study him and his Creator, and you will find little else of interest to study.

OUR METHODS ARE PECULIAR, AND YET ADEQUATE.

The pressure is absolutely removed by what we call Chiropractic, which means "hand practice." Hence the name, not of a science, but of the method.

In the application of means to relieve the strain, Ophthalmology comes into use, and in many cases it is essential that it be used, for through that we absolutely measure the status of the blood and nervous system, and do not have to guess at the condition; but we actually analyze conditions, and find out absolutely how much waste is going on all the wakeful hours through the use of the nerves which end in and control the functions of the eyes. We remove the strain, through this method, which causes so much pain and disease that to mention it would astonish the reader, and through this means and the spinal nerve treatment we leave nothing out of the method of taking off strain and pressure, so that all functional ills come under the purview of this science we have named Neuro-Ophthalmology.

NERVE EXHAUSTION, NERVE WASTE, NERVE POWER WASTES.

We hear a great deal said about nerve exhaustion, and yet but few people comprehend what it really means, or why it is so, and it may be going on all the time in an individual for a series of years and the individual not be aware of it.

It is a fact that nervous exhaustion comes from strain, or overuse of any particular organ in the body; but as a consequence of advanced civilization we use the eyes more than all of the rest of the organs in the body, and that the nervous system which goes to, and ends in, and controls the eyes in all their functional actions; it follows as a natural result that more waste of nerve energy is expended through this organ than those less used, hence the importance of looking after this part of the body as a means of arresting the exhaustion of the general system through this constant drain through the nerves which control the functions of the eyes, and which are correlated with all of the rest of the physical body. There is a constant leakage going on through the

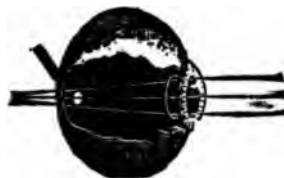
overuse of the eyes which the medical profession has given but little, if any, attention to, which we have studied and seen demonstrated, and are able to demonstrate ourselves, must be arrested in order to have health, or restore to health those who are afflicted from this cause.

There being special facilities to find out and accurately ascertain the exact amount of nerve power being lost throughout the whole system through these organs, and accurately measure the nerve strength of each and every individual, and see and know the exact state of the blood and other fluids of the body, we know positively how to arrest this waste and to restore to health all who are afflicted with functional ills through our methods of treatment of the eyes and spinal nervous system. Our system is the most rational, the most certain, the most effectual of all methods ever discovered by man, and embraces all that is essential in the treatment and cure of all human ailments. We not only teach these principles to students, but actually prove them to all persons interested.

THE OPHOHALMOSCOPE.

HYPEROPIA.

This is a condition of the eye which means "far-sighted," "far-seeing." The natural eye sees 20-20, but the hyperopic eye may see 20-15, or even better. To see better than natural requires a strain of what is called accommodation. This strain involves nerve power, and shows a superabundance of reserve force. The amount of nerve force indicates strength of nerve, or over-supply, above normal. This nerve power induces its possessor to rebel against the use of glasses, for the sight being good, one would naturally conclude that glasses were a useless appendage. This is the mistake of the age, for herein lies the source of all functional diseases. This is indicated in the wrinkled eyebrows, small, deep-set eyes, rough skin of face, headache, nervousness, bowel troubles, stomach pains, dyspepsia, constipation, female disorders, and almost all human ills.



HYPEROPIC EYE

The most wonderful results follow the use of the proper lens in cases of cross eyes. Eye strain produces the cross, and the strain removed, the cross ceases. If not, why not? Can any one

give a reason why an oculist prescribes a concave lens for a hyperope except to make him see clearer? Does the oculist or optician know that a minus lens on a hyperope doubles the strain and increases the difficulty he aims to arrest? If not, what reason has he for prescribing glasses at all?

CLINICAL SUGGESTIONS CONCERNING HYPEROPIA.

It will be remembered that a hyperopic condition of the eyes is due to nerve irritation; that this nerve irritation produces contraction of the muscles in which the nerves irritated end, and this interferes with the normal circulation of the blood in the muscles, and a sympathetic reflex action takes place in all the sphincters of the body, causing disturbance of function; hence sore eyes, female irregularities, piles, rough skin, and constipation and indigestion, or any disease or functional disturbance anywhere in the body.

After correction of the hyperopia, the source of irritation being removed, nature resumes her normal attitude, functions, in (of) the body, and health is restored, the cause being removed. Full correction acts as if by magic in many cases. The correction not only rights the difficulty apparent, but the whole nervous system assumes control, and many chronic conditions, thought to be incurable, begin to assume a normal action, proving conclusively that the nervous system is at fault, hampered in functional power. Sometimes the patient will experience a functional disturbance for the time being, and vomiting will set in, which shows that an effort is being made to right the wrongs which had before existed. This is, however, only temporary, and will soon subside, to the betterment of the patient in every respect, and for such occasional freaks none need be surprised, for it is only an effort of nature to adapt herself to the changed conditions caused by the correction of the hyperopia.

Sore eyes of every form and variety yield to the rational treatment of the Ophthalmologist. Inflamed lachrymal glands, ducts and sacs, yield to taking off the strain of the nerves which end in and around the organs or parts affected, hastened oftentimes by the local application of a little salt and water, applied

for a few moments at a time several times a day. Cold water if only inflammation is present, but hot if there is pain present.

If there is a condition of asthenopia present, indicated by seeing well one moment and the letters fading out the next, there should be caution as to a long testing of the eyes at the time, not but a few moments, and simply put on plus glasses, and order absolute rest for the time being for several days, and then attempt examination again. This condition denotes spasm of the ciliary nerves. Patients thus afflicted should be excluded from the presence of other persons during their examinations, and if, on further examination, the letters fade away gradually, instead of spasmodically, it indicates a diseased condition of the optic nerve; then absolute rest must be enjoined for several days in a darkened room, well ventilated. This condition justifies the use of atropine, in order to give the third nerve rest, and a time to recuperate the second or optic nerve, hence absolute rest of all of the nervous system is indicated in such conditions.

It will be remembered that a larger percentum of the so-called diseases, functional ills of humanity, are caused by hyperopia, eye nerve strain, so that the important and essential thing to do in all cases of any functional complaint is to be sure to ascertain this fact, whether it exists or not, and correct it, as the primary thing in your treatment of the case, and then the patient has a better assurance of being cured than under any other course of treatment. The reasonable thing to do always in the cure of any ailment which afflicts humanity is to remove the cause first. There are certain conditions of sight which are necessary to consider: If the patient can see as well through a plus lens as without it, it is not too strong, and as long as a person sees as well without a minus lens as with it, you should not prescribe it. Avoid over-correction in myopia.

"If a minus lens number .50 ax. 180 gives normal vision, you had better prescribe a plus .50 ax. 90, even if found under a mydriatic (atropine). If a minus cylinder, say -2.00 ax. 180 (a minus cylinder), gives normal vision, and the patient still has accommodation, prescribe a plus .25 or a plus .50 sphere in connection with the cylinder, so as to reduce the vision to 20-30, or

one line above normal. This is a safeguard to prevent over-correction, and saves a little strain in coming up to the reading point."

• MYOPIA.

This cut represents a condition of the eyes which do not see objects at a distance. This condition is near-sightedness, and is a diseased condition.



MYOPIC EYE.

The question is often asked, How long shall I have to wear glasses to be well? The answer is, That depends upon circumstances, but, generally speaking, until well.

If one needs a glass to "stop the leak," is it not as necessary to keep the "leak stopped" as it is to "stop" it in the first place? If one needs help, does he not need it all the time until fully supplied, and then does not the supply need to be kept up all the time?

One who has taken medicine for years and is not well, and "stopping the leak" cures the complaint, will not "unstopping the tank" cause another leak? If one has hyperopia, the cause is nerve strain (the leakage which causes so many ills). This leakage must be kept closed, or the drain is renewed. "Stop the leak and fill the tank," and keep it filled, are essential to immunity from the effects of loss of nerve supply.

For any errors of refraction the patient should wear glasses constantly; the hyperope to relieve the nerve strain and to improve vision if it is below normal, and the myope to improve vision and to correct the action of the muscles of accommodation coördinately.

When the eye has matured, which is about the age of eight or ten years, if the correction is equal to the error, no changes of lenses are required. When a condition arrives called presbyopia,

at about the age of forty, it will be found that additional spherical glasses will be found necessary for near vision only. These it will be found necessary to increase from time to time, as the advanced age decreases the accommodative power. A plus 3 D. lens having been reached, this will always enable one to see at the distance of thirteen inches. For seeing nearer, stronger lenses will be needed, and for a fixed point, the focus of the lens may be determined, for a plus lens has a definite focus, and hence whatever distance the work is from the eyes, the lens may be fitted accordingly for seeing.

CROSS EYES, TO TREAT.

That this condition is due to nerve strain, or an irritation which produces muscular contraction sufficient to draw them out of gear, is certainly a proof of the philosophy of nerve influence, nerve irritation, or nerve pressure, being responsible for all functional disturbances in the body commonly denominated disease. The fallacy of cutting a muscle when the muscle is as sound as any muscle in the body is reprehensible. Whenever the tonic spasm is overcome, the eye resumes its normal condition. This spasm is an overstrained condition of the nerves, which affects the muscle through the nerves ending therein. The foolishness of cutting a muscle is absolutely criminal, unjustifiable, and evidence of ignorance on the part of the operator of the nervous system, its functions, and relationship to human ills. The use of a plus lens strong enough to overcome absolutely the hyperopia is the remedy. There are cases in which blindness has resulted from the long unused retina, but the eyes will, nevertheless, come straight if the proper lens is used and continued until the spasm subsides; then the strabismus is gone, and the eye is not injured by any cutting.

In removing that most common of all causes of functional diseases, hyperopia, we have especially to consider the refractive power or properties of the dioptric system, which are of two kinds, static and dynamic. The static is when the muscular system is at rest, and the eyes are adapted to the most distant point at which it

can see distinctly. This point is called *punctum remotum*. The dynamic refraction form, or sthenic form, active form, is measured when the muscular system, the muscles of accommodation, are exerted to their fullest capacity, and the nearest point at which it can see distinctly, and this is called its *punctum proximum* (near point). The difference between these two points is called the "range of accommodation," or amplitude of accommodation, the power of the eye to accommodate itself to any distance between the far and near point.

In testing the eyes to ascertain the amplitude of accommodation, we ascertain how far the individual can see objects distinctly, say Snellen's test type, twenty feet away. Note it down; then place a piece of common newspaper print, and in a good light, in the hand, and ascertain how near reading can be done, straining the eye to do so, and measure the distance. We express the near point in diopters, and this is the amplitude of accommodation. It will be remembered that a diopter is about forty inches.

Persons with normal eyes and at about the age of ten years will generally manifest the greatest amplitude of accommodation. This is owing to their power of increasing the curvature of the crystalline lens. Rays coming from a distance of twenty feet or more are termed parallel, and that distance is called infinity, and the far point of a normal eye is at that point. The far point of a myopic eye would be nearer, owing to the convexity of the lens. The far point of a hyperope would be beyond infinity, and the myope nearer than infinity. The myope is one whose retina is behind the principal focus of the dioptric system. Hyperope is one whose principal focus in the dioptric system is behind the retina. An emmetrope is one whose focus of the dioptric system is on the retina, or at the retina.

Astigmatism means "without a point," and denotes a condition of the eye where the retina is at the principal focus of the dioptric system in one meridian, and in front or behind it in another, or where the retina is in front or behind the focus in both meridians, or at a greater distance in one meridian than in the other, or where the retina is behind the principal meridian and in front of it in another. Astigmatism is supposed to originate in the

cornea or in the lens ; most generally it will be found in the cornea, almost always. If it should have its origin in the lens, it is due to nerve irritation, and the same remedy which applies to strabismus would apply to it. But the cornea being the locality where we will find the trouble, we correct the difficulty as best we can with cylindrical lenses.

The five different sorts of astigmatism may be thus classified : Simple myopic astigmatism, where the curvature in one meridian is normal and in the other at right angles to the first. Second, compound myopic astigmatism, where the curvature is too great in both meridians, but greater in one than in the other. Third, simple hyperopic astigmatism, where the curvature in one meridian is normal and in the other not great enough. Fourth, compound hyperopic astigmatism, where the curvature in neither meridian is sufficient, but in one is more deficient than in the other. Fifth, mixed astigmatism, where the curvature is greater than normal in one meridian and less than normal in the other meridian.

An astigmatism where the two principal curvatures not only differ, but the curvature in one or both meridians is irregular, no known method of correcting this condition is discovered. In practice we find very few cases of astigmatism sufficient to pay attention to until the eye strain caused by the hyperopia is removed, and at the final test we look after the astigmatism and correct it, and prescribe accordingly.

All defective conditions of the eyes are all classed under the head "Ametropia"—abnormal. Unequal vision is classed under the term "Anisometropia," and means that the refraction of one eye differs from the other, causing unequal vision. There are three kinds of anisometropia: (1) Where both eyes fix at once, and where binocular vision exists; (2) where each eye is used alternately; (3) where one eye only is used, the other being permanently excluded. The correction should be made as early as possible, and as this condition is due doubtless to unequal nerve power, and that in the nerves which go to and end in the ciliary muscles, it can be attributed to nerve waste in some of the filaments controlling certain parts of that muscle. And while some cases are benefited by bringing the best eye back to the condition

of the worst eye by "fogging" for some time, the cases, as a rule, are uninfluenced for good by the use of glasses, and these cases need, and should have, the neck and spinal adjustment and the indicated diet and normal habits, to equalize the forces in the whole body. Especially the hyperopia should be corrected in the fixing eye; the best one, if found to exist. Very many of these conditions are beyond the ken of mortals.

Presbyopia is a condition caused by advancing years, and is a result of loss of nerve power, due to a deficiency in the elements which constitute the media through which the power is conducted, and especially through the nervous system which controls the muscles of accommodation, the ciliary nerves, the terminals of the filaments of the leash, which is denominated the third nerve. This loss of nerve power affects the accommodative apparatus. The study of the nervous system is one especial desideratum in this method of physical practice, and the advancement is infinite; the more one knows of the nervous system and the power which pervades it, the better will he be prepared to comprehend the magnitude of the system which eventually will be the leading method of healing.

NEURITIS.

Optic neuritis means inflammation of the optic nerve, and may begin in the brain or at the periphery of the nerve. If it begins at the end of the nerve, say in the retina, it is called ascending neuritis; but if it begins in the brain and descends, it is called descending. It may be differentiated by the condition of the eye. If there is redness and fading vision, gradually fading out, it is ascending, and the cause is due to irritation in the ends of the nerves in the retina itself; but if there is more of a pallor than a redness, and but little if any sight, the trouble is in the brain, at the origin of the nerve; and if it involves all of the filaments, blindness will be the consequence, and is usually sudden. Both conditions are the result of either capillary or venous congestion.

These conditions are symptoms, and the causes lie deeper than the retina, and generally there have been disturbances elsewhere in the system long before the manifestations in the eye or the sight is impaired, and when the failing vision begins to manifest, the organs involved have gone far along in degeneration; for instance, Bright's disease of the kidneys, albuminuria, or any other trouble; or there may be a failing sight in *retinitis pigmentosa*, and only night blindness occur, and no pain attend this condition; or there may be glaucoma, with undue hardness of the eyeball, due to filling up of the eye with venous and arterial blood from closure of the outlets, as observed in "choked disk"; and many other conditions cause an inflammation of the whole eye and a deterioration of sight, and none of these conditions observable until far advanced.

There are so many conditions which cause blindness, that the eye itself does not complain of, that too much attention can not be paid to the condition of the eye. In the iris we are informed that every disease makes its sign, so that one conversant with these signs should be able to read therefrom not only the conditions of the eyes, but of the whole body. This will eventually be a matter of study, when every one learns the importance of the eyes. They are the indices standing out in bold relief, pointing with unerring certainty the way the physical body is environed, and tells where the enemies are lurking ready to do harm. As the contour of the scalp and the wrinkles in the hand tell the character, the life of the individual, so the marks and spots in the iris tell the kind and localities of disease. While we have the key to unlock the great storehouse of the citadel of life, and know how to stop the leakage, the iris tells with certainty where it is and the stage of its ravages.

The commonest of all nerve strain is found to be those sup-

plying the muscles in the organs of sight. While this may be surprising to most people, it is nevertheless true. One-tenth of all the nerves which constitute the nervous system end in and control the muscles of the eyes, and they are so easily influenced by the light necessary to see that a constant strain takes place when the person attempts to hold the focus on any object, especially any near object. And it is a demonstrated fact that wherever the mind is directed steadily for any length of time, a superabundance of blood accumulates in the organ used, and the accumulation held in said locality over a brief period, a condition ensues we denominate congestion, and this condition influences the nervous system either by stimulating it too much, and causing inflammation of the tissue involved, or separating footlets of the nervous system, thereby interfering with nerve function, suspending function, or paralyzing, and thus disturbs the harmony in the system, and causes disease. This condition is seen in those who use the eyes overmuch and persistently, as school attendants do, and as a result we find, at the close of school or before, so many nervously prostrated, broken-down, exhausted ones, who, if they had had the proper correction of the errors of refraction when they should have had it done, the labor of study would not have made them invalids and nervously prostrated, as so many now are.

The masses seem to know but little, if anything, about the functions of those nerves which are concerned in the organs of sight, their influence on the nervous system generally, or they surely would not permit their own students to be broken down before they begin the great studies and responsibilities of life—before their education is completed sufficiently to even begin life's work. The strain begins early in some individuals, later in some, and some time in all, and if neglected or not properly attended to, much harm ensues, perhaps irreparable injury, not only to the sight, but to the nervous system as well. Here we trace the cause of many of the ailments which might have been avoided had attention been given at the proper time. We are aware of the diffidence and indifference regarding this matter, and know that it is not intentional, but through lack of understanding of the consequences.

And now, that the reader may have some idea of the relationship between the nerves which supply the eye and the sympathy existing with them and the rest of the body, attention should be directed to the care of the eyes, for the strain on them causes a large percentage of the diseased conditions of the human family. The things which most concern us we seem to care the least about.

If it were a matter of teaching the reader anatomy, we would begin with the structure of the orbit and minutely describe every part of the eye; but the afflicted do not care to make that their study, for the point in which they are interested is how to get relief, and when that is attained there is satisfaction. A delineation of what has been done, or what others have received, is not of so much interest as "What can you do for me?"

The science of optics as understood by most of the so-called opticians has more to do with refraction in general, rather than with the pathological conditions resulting from the abuse of the nervous system. The Ophthalmologist occupies a higher sphere than the oculist, who simply corrects refraction (or attempts to), without any regard to changing the status of the nervous system from a pathological to a physiological condition (from disease to health). The operations (tenotomy) for cross eyes is one that should seldom be done, for if the proper correction of refraction were made, which may be done, the strain is removed, and nature restores the lost equilibrium, and the error is righted without cutting. Then we have another serious blunder to oppose, and that is the use of prisms to overcome "muscle strain," for there is no such a thing as "muscle strain." The nerves are strained, tired out, exhausted!

With all that has been written on or about the eye, but little truth has been exhibited, and most of what has been said is a repetition of some one's opinions, and not that advancement we should expect from so learned a body as the oculists of the world. Pathological conditions have been attributed to other sources than their real ones, and the treatment has been in the direction to "bacteriaoides" (bug destroying), rather than the removal of the real cause. The nervous system has not received the attention due it, and the consequences are largely failures in Ophthalmology

by the oculists of the day. Learned disquisitions and theoretical deductions and hypothetical imaginations have very little to do with the facts involved. Any hypothesis incapable of proof is absolutely worthless, and should be forever abandoned. What we can demonstrate should be accepted and utilized, for we need proof of efficacy in all matters where our well being is involved and comfort is concerned. When we state that much of the suffering and exhaustion so prevalent among business people, and school children as well, is directly attributable to eye strain, we are not overdrawing the picture, nor stating what can not be shown by actual tests. The nerve strain shows itself in general prostration, and headaches, constipation, female weakness, and indigestion, as well as in a general breaking down.

WHY NOT GET AT THE FACTS AT ONCE?

If medicine had curative power or properties in them, and there was a certainty in them, a certainty of effects in any, or even a majority, or even a few cases and conditions, there could be some dependence upon its use. But one medicine is extolled and blazoned forth in red-ink laudations for a time, and many take it, but few, if any, receive any benefit therefrom, and it is retired; another is in like manner highly recommended, and it, too, consigned to a like fate; and thus one after another is tried and proven worthless in staying the tide of suffering, and people seek in vain for relief from that source, and as medical doctors increase, diseases and suffering increase. That men and women are deceived by medicine vendors is too true to make a joke of, and will be right along until educated out of that idea.

Since the first recorded case who took medicine until now, the use of medicine has been one continuous and stupendous, absolute disappointment! That many have gotten well who have taken medicine is true, but the same may be said of those who have been sick and taken no medicine. The faith cure, mental science, suggestive therapeutics, Christian Science, Osteopathy, and the masseur treatment as well, have all had their victims, and cures have followed them all. Each claiming superiority of efficacy of their

particular theory and "scientific" means, and a strictly scientific and absolute cause of human ills, has been the wonder of the ages, until the individual, physical man has been thoroughly studied, and his powers analyzed; and this has only recently been accomplished. It has been actually proven and demonstrated that the nervous system is, in a certain sense, the media through which all effects upon the physical organism are produced, and that when no pressure or strain is made or found upon the nerves going to and ending in any part of the body, that perfect harmony exists throughout the entire system, and that health moves on as a peaceful stream, uninterrupted; but that overuse, strain, or interference with the normal functions of the nervous system produces functional disturbance of the parts where said disturbed nerves end in the body, and sooner or later a special or general disturbance ensues as an absolute result; and removal of these permits nature to invariably rectify the wrong and cure the conditions caused by the strain and pressure.

THINGS WORTH CONSIDERING.

The question is often asked, "Why do so many people need to wear glasses now? When I was young you would scarcely see any one but old people wearing glasses?" This is a legitimate question, a proper one, and we shall try to answer it in the light of reason. If we take into consideration how little the eyes were used then, in comparison with what they are now, that will be sufficient answer to those who know that the use of any organ in the body causes it to need more nerve power; and while the organ itself may not show any signs of loss of power in and of itself, and may even appear to be stronger, and be performing its functions better than natural, yet we may notice, by careful investigation, that the rest of the body begins to show signs of lessened power, and sooner or later the whole body becomes a nerve wreck, or some special part of the body will be lacking in power to perform its functions, then another, and another, and ere long the whole body seems weakened, "gives out," and the weakness has been so gradual that the one afflicted does not pay special atten-

tion to his condition until complete exhaustion of the whole body ensues. This is what the doctors call "nerve waste," nervous prostration.

There may be no pain anywhere in the person so reduced (as not to be able to go about, but a gradual wasting away and general weakening of the whole body), but in many cases a different condition is found to exist. The head aches at spells, growing worse as the days come and go; constipation may be one of the conditions which annoy; the stomach may not feel just right; food may sour after eating, distressed, bloated feelings may be noticed, and finally pains and a general uncomfortable feeling prevail most of the time. Piles may come on, or nervous spells, even to fits, and the liver and kidneys may not be doing their duties, and the heart may have spells of palpitation, and a general bad feeling all over most of the time; and the patient may take cold easily, and have catarrh and all of the various and sundry ills that are common to humanity, and yet not have any idea as to the cause of all these troubles. This is not an overdrawn picture, neither is it made up to the full extent of what it really is, in many cases, for the results are often worse than pen can paint or tongue can tell. Now all these conditions are the result of nerve strain, nerve pressure, and overuse of the nervous system in any one part of the body, but the nerve strain of the eyes are most generally the organs to look to for the trouble.

CROSS EYES—TO CURE.

Cross eyes are so ungainly and unbecoming a disfigurement that it would seem to be a boon to the one having such a deformity that he would make every effort possible to overcome the deformity. And now that there is a positive remedy for almost every case, without any cutting of the muscles involved, it would seem that none should be so, long. Here is the remedy: Test the sight of the eyes, both of them, if there be sight left in the cross eye, and put on both eyes a strong enough plus lens to either make the good eye see as dimly as the bad eye (provided there is sight enough in the bad eye to see to get about), or at least not clearer than 20-80 Snellen's test card; and it would be

better to put the sight back to 20-120 and keep the glasses on patient during wakeful hours until the eyes come straight, and then have them worn for a few months afterward; then correct vision again, and put on the correction which brings the good eye back one line above where he can see with the naked eye. Letting this be the rule, the eyes will be all right afterward, if worn. This will result, even if the cross eye is altogether blind. In case there is sight left in the cross eye, it may be improved by use, and a good way to use it is to fog the good eye back to its strength and compel patient to bear the inconvenience for months, and thus insure an attempt to use the bad eye as much as possible. The thing to remember is, do not permit the cross eye to be strained at any time, or it will return to its condition from whence it has been delivered. Glasses will have to be constantly worn after the eye is straight, because strain was the cause of the cross, and it would do the same afterward. This is the best remedy for cross eyes, for it is always successful. This remedy alone is a marvel in Ophthalmology.

The reasons we do not enter into a general treatise on eyes: First, there are but few of the readers of this book who care to make a specialty of refraction, or even treating the eyes with glasses to cure disease, preferring other lines of practice. Second, if we were to fully embrace all that one should know to be a successful, intelligent eye specialist, it would require a full outline and explanation of all of the conditions called diseases of that organ, anatomically, physiologically, and pathologically, together with the law of physical optics. This we have not space to give. Third, the means of ascertaining the amount of nerve strain is all that we consider in this treatise, and that especially under the head "Hyperopia." That condition of the eye is the essential thing to correct, for almost all diseases of a functional character spring from results of eye strain. Inasmuch as so much is

involved in this department, and the proper correction is fraught with such favorable results, we deem it sufficient to only deal with this department of Ophthalmology, and leave the student who wishes to acquire further knowledge of this part of the human body as a special study to attend a college where the science is amplified, and applied systematically and specifically.

THE NERVES OF THE EYE FACTORS IN PRODUCING DISEASE.

The structure of the eye as regards anatomy may be studied anatomically in the various books on the anatomy of the human body. The general make-up is spherical, and forms a camera for the admission of light, and the media through which the light is admitted is made up of, first, the cornea; second, the aqueous humor; third, the lens; fourth, the vitreous body. The admission of direct rays—parallel rays—and of oblique rays differ as the effects differ. The one is without an effort on the part of the muscles of the eye, or as regards the influence of the nervous system which controls the eye. The direct rays cause no strain, but the oblique rays do; and the latter are the source of nerve strain, and we are affected physically, in proportion to the effort made, to control the amount of light admitted into our eyes, and the how it is admitted.

That part of the eye called the retina is made up of the endings of the second nerve filaments, and these are in layers, reaching as far forward as the *ora-serrata*. It is said to have ten distinct layers, merging into six layers at, or near, and around the "yellow spot," where sight is the most distinct. The media is composed of clear substances, and parallel rays of light pass directly to the retina without refraction (without breaking); but it being a law of physics regarding light that "rays of light, on

entering a denser media at an oblique angle tend to converge toward the perpendicular, they necessarily break at their entrance of the denser media. The media of the eye is denser than air, in the ratio of 1 to 1.33, so that the rays of light entering the eye at an oblique angle are broken, and the outer rays, retarded in their course, turn toward the base in the above ratio, in passing through the media of the eye. Now, as the admission of light, oblique rays, requires an effort to control the amount of light they transmit, there is an apparatus at the very threshold, which is called the iris, a circular muscle, with both circular and longitudinal fibers, controlled by the filaments of the third cranial nerve ending in said muscle, which permit of lessening the size of the pupil (the round hole in the iris), or increasing its size. Our attention will be directed to it, for this is the key to the problem of eye strain, nerve waste, the loss of nerve power, hence the cause of functional human ills.

The constant strain on the nerve to regulate the size of the pupil so as to focus objects at all distances may be borne for many years, while the supply is large and the recuperative power is strong; but after a while we discover symptoms of strain, exhaustion, notwithstanding the fact that the eye is the only organ in the body which overcomes its own defects. The constant effort to see what passes before the eye, and especially when near objects are seen, requires an effort on the part of these muscles, the ciliary, and as muscles have no power within themselves and only one function, that of contraction, there is a constant draft on the nerve elements to execute the power to control the muscles. This constant strain is shown in the following table, expressed in diopters:

$$\begin{array}{l} \text{Accommodation: } \left\{ \begin{array}{l} \text{Left Eye, } + 3.00 \\ \text{Right Eye, } + 3.00 \end{array} \right\} = 6.00 \text{ D.} \\ \text{Convergence: } \left\{ \begin{array}{l} \text{Left Eye, } + 1.50 \\ \text{Right Eye, } + 1.50 \end{array} \right\} = 3.00 \text{ D.} \end{array}$$

Total, 9 D. of work in performing their labor, that of accommodation and convergence, and this is going on every second of wakeful hours. To find out how much nerve power one is losing in a day through the action of the nerves involved, all we have to

do is to multiply the 9 D. by 60, then by 60, and then by 3, to get the amount of work done in three hours, which we find to be 97,200. Now, to it we add the supposed strain of the second, fourth, sixth, and one-third of the fifth nerves, 2,800, we have 100,000 D. for the three hours per day labor. Now, if we estimate these nerves as one-tenth of the nerve strain going on through all of the forty-two faculties, we will have for three hours a strain of 1,000,000. This is an estimate of only three hours' labor for the entire body, or, rather, the forty-two faculties of our nervous system. The above is the emmetropic standard.

If there were no more strain than the above described statement indicates, there would be but little need for considering the strain as a cause of disease; but we find that, in the hyperope, the one who has at least one diopter of strain of accommodation additional, it changes the conditions materially, for this gives a strain of at least 23 per cent. of loss of nerve power, as per the following table:

Accommodation:	}	Left Eye, 0.50	}	= 2.00 D.
				}
		Right Eye, 0.50		
Automatic Convergence:	}	Left Eye, 0.50	}	= 1.00 D.
				}
		Right Eye, 0.50		
Negative Convergence, 3rd and 6th Nerves:	}	Left Eye, 1.00	}	= 1.00 D.
				}
		Right Eye, 1.00		
				Total, = 1.00 D. both eyes.

The above represents the strain a hyperope of one diopter is undergoing every second of wakeful hours, and it amounts to 23 per cent. per day of sixteen hours' exercise of the eyes. Multiply 4 D. by 60 by 60 by 16, and we have 230,400, which equals 23 per cent. of nerve strain.

SOME OF THE PRELIMINARIES ESSENTIAL TO A PROPER UNDER-
STANDING OF HOW TO USE THE TEST CASE, TRIAL
FRAME, AND KIND OF LENSES NEEDED
CORRECT ERRORS ACTION

The trial case should have minus (—) spherical lenses, rather than plus (+) lenses, and should be held to the eye to

at least ten diopter strength, graded from a quarter diopter, increasing a quarter diopter to four diopters, then increasing a half diopter the balance. Then there should be corresponding plus and minus cylinder lenses on other side of case, together with prisms, from a half degree to twenty degrees, and the double prism, slots and pinhole disks, and black and red disks, and an extra trial frame for loosely holding lenses. The regular trial frame should be arranged for special convenience for changing lenses and fitting cylinders, and all such things as temple and pupil measure, height of nose bridge and side bows, so as to hook over the ears, and a slide arrangement, so as to accommodate any sized face.

The card board for distance test is the "Snellen" card, "test card board," kept by optical companies. The astigmatic chart should be utilized in every examination, and a record kept of every step taken in the examination. The careful study of the power and action of lenses should not be lost sight of, for the examiner who prescribes glasses for defects under this system should know that they mean for good or evil, according as they are applied; hence, certainty should be absolutely the rule, for this science recognizes the fact that actual measurement of nerve power can be determined and ascertained by the intelligent application of this science, with the trial case; so that the weal or woe of our patients is in our hands, and we should know what to do in every individual case which comes to us for relief. This is not a "guess-work" in any sense, but an absolute mathematical science; hence its superiority over all others.

This department is of inestimable value, and crowns the other two methods with success. The individual who would be a physician in the fullest sense of the term should understand all that we have shown in this book, and each several department is within the reach of all intelligent persons; but it requires time, and close, hard study to master them.

HOW TO MEASURE ERRORS OF REFRACTION.



THE "FOGGING SYSTEM."

The simplest way to do a thing is always the best way. This method of procedure is the simplest, easiest, most accurate, and the quickest, and has been the most satisfactory of any, for it fully determines nerve power used through the organs of vision. The principle being correct, it is always successful, when thoroughly understood by the one testing the eyes. It obviates the necessity of using mydriatics, except in very rare cases, and thus removes the dread of having the pupils dilated and sight dimmed for days, and an occasional bad effect therefrom.

The eyes should be examined locally as well for external appearance, whether normal or otherwise, and the patient questioned as to general conditions, history, treatment and habits, heredity and business, diet, etc. These are to be recorded. Then the retina should be examined by the Ophthalmoscope, in order to find the actual state and color and proportion of the blood, its quality and color, etc. And if any other organ is implicated, the kidneys, and if so, the degree of change in structure, etc. Note the shape of the face, whether dished or flat, whether the nose has a low or a high bridge, whether the face is full, round and plump, or flat, skinny and pale, rough or abnormal. Note the condition of the eyelids, cornea, sclerotic, and appearance and conditions generally.

It will be observed that the hyperope has a small, receding eye, dished face, and a low nose bridge, and generally vertical lines in center of forehead, indication of drawn features, as if strained; whereas, in the myope we have a full face, high nose bridge, and a condition just the opposite exists in myopic cases —

myopic people. The one is far-sighted, and the other is near-sighted. One sees objects at all distances, while the other only sees objects near by. The one has a diseased or functional disturbance from nerve strain, but the myope may have a diseased eye, or some constitutional trouble as well. The myopic eye is said to be a "product of civilization," generally a consequence of long use at near work, which in such cases is a result of a bad habit. Very frequently this condition may be remedied by the use of plus lenses.

Having made the necessary examinations and recorded all of the facts desired, the further test of the eyes may be continued, as follows: To test the normal strength of the eyes, we proceed as follows to ascertain the accommodation power: Placing in the hands of the patient a newspaper, ordinary print, before the eyes at ordinary reading distance, we ask the patient to begin to read aloud any special matter cited, and as the reading proceeds request the advancement of the paper toward the face until the reading begins to be difficult to read — read with considerable strain — and there to be held until measurement is taken of the distance from the eyes to the page of reading. Record this in inches or diopters for future comparison after the testing is completed.

It will be understood that a diopter is about 40 inches, and if we divide that number by the number of inches the reading is held from the eye to read it, say eight inches, we have as a product the number 5, which means a fifth diopter. This rule will hold good for any other distance, and should always be correctly recorded.

Having ascertained the accommodative power of the patient's eyes, we have him seated at a distance of twenty feet, fifteen feet, or ten feet, as the case may be, in front of a Snellen test card, with a good light, showing the letters distinctly, and ask the patient to read the letters on the card, beginning at the top (largest letters) and read down, as many times as possible, with both eyes open, and record this, what line has been seen, the lowest and the smallest on the card; understanding, to begin with, that these lines have a signification which aids in forming a conclusion of your analysis of the case at the final conclusion of the examination,

and constitutes one of the peculiarities of difference between this method and all others practiced. It is absolutely important to note all and each step in the proceedings of examination. This is essential to a correct knowledge of the actual condition of each and every case examined. Next, place a card over one eye, and have the patient read the card down, as before, recording last line read, and change card to other eye; have card board read as far down as possible. Record these readings in fractions, as follows: If with one eye patient reads down to the line with 20 above it, record it as follows: 20-20; and if with the other eye the card board is read down to 30-15 or 40, record it accordingly; for instance, 20-30, 20-15, or 20-40, and mark "R" for right eye and "L" for left eye, so as to avoid any confusion; in a word, be particular. This is an exact science, and demands exactitude on the part of the examiner. No slipshod carelessness should be allowed in a correct application of a science which has such wonderful consequences as this. If the patient sees the line on card board marked 20 above it, twenty feet away, that shows normal vision. If he sees the line with 15 above it, twenty feet away, it shows above normal. If above normal, it is an evidence of hyperopia, and that no astigmatism, or but little, exists. It is well to consider these conditions and record them accurately.

THE MUSCLE TEST.

The simplest way is to place before one eye a double prism, and before the other a plain red glass, covering it with a black disk. Now have the patient look at a light or a square white object in front of him, and so arrange the double prism that he will see two objects, either two lights or two white spots, and they in line vertically; now remove the black disk from the other eye, and there will be a red light between the two white lights or objects. If the eyes are normal, the red light will be in line with the two white lights; if to either side, it denotes weakness or irritation of the nervous system, and the degree of deviation may be measured by a prism. If the deviation is to the right and left of the center, the condition is called exophoria; but if the lights separate, it is esophoria, if they cross over. The eyes in

muscular insufficiency deviate the same way the lights do. If the deviation is up or down and out, it is hyperexophoria; but if it is up or down and in, it is called hyperesophoria.

To measure the amount of the deviation, a prism should be held before one eye—either eye—until one is found which brings all the lights in a line, and the strength of the prism determines the degree of deviation. If the base of the prism is toward the nose, it proves that the internal recti is too active, and indicates nerve strain (of the nerves supplying the internal recti). The result is a contraction of the muscle, and the eye turns inward, out of equilibrium. If the base is turned outward, it shows the weakness of the internal recti nerve endings, and there is a manifest weakness of accommodation power.

If the base of the prism is up or down, it shows weakness of the superior recti in one eye, or the inferior in the other eye. If in an angular position, it may indicate involvement of several muscles. The weak muscles are always under the apex of the prism. Prisms do not cure these conditions, and should never be prescribed for that purpose. Always correct the errors of refraction, and prescribe absolute rest for the patient, and nature will cure the muscle trouble.

The foregoing is a method of ascertaining the dynamic power of the nervous system, for the double prism throws the muscles out of "gear," and any deviation from a normal condition is manifested. The normal state is called "orthophoria." Any deviation is called "heterophoria," and the latter may be classified as follows: Esophoria, where the eyes turn in; exophoria, where the eyes turn out; and hyperexophoria, where the eyes turn, one up and the other down; and these may be combined with either of the two first named, and is named accordingly hyperesophoria, hyperexophoria. The test demonstrates a nervous difficulty, strain or weakness, and furnishes us a key to the condition. If there is exophoria, it means weakness, and if there is esophoria, it indicates an irritation of the nervous system which supplies the muscles of the eyes. The one we call exhaustion, and the other irritation, which sooner or later causes strain of all the nervous system through sympathy, and functional disturbance anywhere.

Now comes the correction of the sight, which we utilize for ascertaining what glasses are needed to stop nerve waste. After having found the actual strength of the nervous system which controls the functions of the eyes, we proceed to correct the vision. If there is any difference, correct the best eye first.

We place in the front cell of the trial frame a plus (+) lens (sphere) strong enough to blur vision until the largest type on the card board is seen dimly in front of one eye, and in the other side a black disk. This leaves but one eye to examine for the time being, as the black disk obscures the sight in the other one. Begin the "unfogging" (for the plus (+) lens before the eye that sees the letters dimly is in a condition we denominate "fogged") by taking from the trial frame the weakest minus (—) lens, —25 in one hand and a minus (—) 50 in the other, and hold before the eye that is fogged first the —25 and then take it away, and hold the —50 there a moment; then replace the —25 into the case and take therefrom a —75, and now again hold the —50 in front of eye, and take it away and place the —75 before the eye, replacing the —50 back in case, and take a —1.00 next, holding the last one, —75, in front again for a moment, then the —1.00, and continue thus with the higher minus lenses until the patient sees the line above the one he could see in looking at the card without the glasses on. Now, having found the strength of the minus (—) you last held before the eye, subtract that number from the "fogging lens," and take from case a plus (+) lens, which represents the difference between the minus (—) lens last used and the fogging lens, and place it in the rear slot, behind the lens used for fogging, and take the other lens out. See if the patient can read as well as before. If so, let that suffice as to the spheric correction.

Now call attention to the astigmatic card, having the patient see if all the lines are black alike, and if not, which are the blackest, noting the meridian the lines are the blackest, and take from the case a slot disk, slip it into the front slot over corrected eye, with glass in frame, with the axis (the opening) opposite to the black lines, and now hold minus (—) spheres in front of

it (slot), beginning with (minus) -25 , gradually increasing them until all the lines look alike. This indicates the strength of the cylinder required. To get its power where the slot stood, put the axis right in the opposite direction. Then direct attention to the card again, and see if all the lines look alike, and also to the test card, and see if it can be read as well as before; if not so well, hold a minus ($-$) or plus ($+$) lens in front of glass, beginning with the weakest spheres, until the sight is as it was. If the reading is better, add more plus until it is as before (one line above the one seen without the glasses).

THE NEUROMETER.

Emmetrope working at thirteen inches, three hours.

Near Point.	Diopters.	Age.	Near Point.	Diopters.	Age.
$2\frac{1}{4}$ inches	14.00	10	8 inches	5.00	38
3 "	13.00	$12\frac{1}{2}$	9 "	4.50	40
$3\frac{1}{4}$ "	12.00	15	10 "	4.00	$42\frac{1}{2}$
$3\frac{1}{2}$ "	11.00	$17\frac{1}{2}$	11 "	3.50	45
4 "	10.00	20	13 "	3.00	$47\frac{1}{2}$
$4\frac{1}{2}$ "	9.00	$23\frac{1}{2}$	16 "	2.50	50
5 "	8.00	$26\frac{3}{4}$	20 "	2.00	$53\frac{1}{2}$
$5\frac{1}{2}$ "	7.00	30	26 "	1.50	$56\frac{1}{2}$
$6\frac{1}{2}$ "	6.00	34	40 "	1.00	60

These are to be added as indicated to above:

1.00 D.,	10 years,	loss of nerve power,	23 per cent.
1.25 D.,	$8\frac{3}{4}$ "	" "	" " $28\frac{1}{4}$ "
1.50 D.,	$7\frac{1}{2}$ "	" "	" " $34\frac{1}{2}$ "
2.00 D.,	5 "	" "	" " 46 "
2.50 D.,	4 "	" "	" " $57\frac{1}{2}$ "
3.00 D.,	$3\frac{1}{2}$ "	" "	" " 69 "
4.00 D.,	$2\frac{1}{2}$ "	" "	" " 92 "

Exceptions.—If there is total presbyopia, or if the error is more than four diopters, add nothing to the table.

For hyperopia, with muscle troubles, esophoria up to three or four diopters, pay no attention to nor add anything; but if of high degree, add 10 per cent. more than if there was orthophoria.

If there is exophoria, and it remains after correction, add three-quarters as much as for orthophoria, and if it is ten or more

degrees, and remains after correction, add one-half as much as for orthophoria.

Exophoria is proof of an abundance of nerve supply and irritation.

If a patient is really younger than is shown by the table after making allowances for his case, he is in a bad condition, and rest is imperative.

THERE ARE OTHER WAYS OF CORRECTING ASTIGMATISM.

One way is to place the slot on the meridian opposite the black lines; direct attention to the lines on the card board and record what he sees; then turn the slot the other way, when the vision will be made worse; now hold minus (—) spheres in front of it until that meridian is as good as the other one, and the minus (—) sphere last used will tell the cylinder required.

And still another way: Take minus (—) cylinders and hold (weak ones first) so that the axis is at right angles to the black lines, increasing their power until the lines are alike. There may be astigmatism, and yet the patient sees no difference in the lines. In such cases we use the slot and the letters. The letters should be always used in testing the other ways.

There are some high degrees of astigmatism in which a trial of the higher power cylinder lenses may be necessary. Begin with the plus (+), and if they don't do, use the minus (—), rotating the axis until the meridian of best vision is found, and if none is found by this process, it will be necessary to build up or down, as indicated. It makes no difference as to how the proper cylinder is found; it should be proven. If reversing the axis makes it worse, it proves it correct; and if not, throw it out. If the reversion of the axis makes it worse, return it to its place and leave it there. Then take a +25 and a —25 cylinder, one in each hand; try the plus (+) first, axis on axis, and if the sight is as good, weaken the cylinder. If vision is worse, try the minus (—), axis on axis, and if that improves vision, do not increase the cylinder until you have compared the —25 cylinder with the —25 spheres; then if the cylinder is the best, the cylinder is proved correct.

Now we ascertain the vision again. Then we test the accom-

modation by having patient read the newspaper print again, taking a measurement of the distance, as at the first, in inches or diopters, and last of all test his muscle power again, if there was either esophoria or exophoria at the starting in of the examination; otherwise this need not be repeated.

In our correction of errors of refraction we should first look for spheres: plus (+) spheres, and next minus (—) cylinders, and third for minus (—) spheres.

In our examination we shall find one or more of the following conditions:

First, plus spheres (+), which equal simple hypermetropia.

Second, + sphere, — cylinder = simple hyperopia and astigmatism, or compound hyperopic astigmatism, or mixed astigmatism.

Third, — cylinders = simple myopic astigmatism.

Fourth, — cylinder, — spheres = compound, mixed astigmatism.

Fifth, — spheres = simple myopia.

Transposition of Prescriptions.—The only kind which need transposition are the second named, which have plus spheres and minus cylinders. These only when the signs differ, and the cylinder is less than twice as strong as the spheres.

To analyze compounds the following is submitted:

To put on the cross—First meridian, first lens. Second meridian, effect of both lenses.

To re-write a prescription—Correct meridian of least defect, if there is one, with a sphere. Allow for its effect on the other meridian, and finish with a cylinder minus (—) axis on meridian first corrected.

Another method of transposing a compound prescription is as follows:

Example: Say we have a prescription as follows:

$$+ 3.50 - 1.75, \text{ axis } 90$$

Now we subtract the — from the + and change the axis, thus:

$$\begin{array}{r} + 3.50 - 1.75, \text{ axis } 90 \\ - 1.75 \\ \hline + 1.75 + 1.75, \text{ axis } 180 \end{array}$$

It will be remembered that when the signs are alike, or when they differ, and when the cylinder is at least twice as strong as the sphere, they are right as they come from the trial frame. But if the signs differ, and the cylinder is less than twice as strong as the sphere, they should be transposed. It is better that the one prescribing do the transposing. The above is the gist of the McCormick procedure as recorded on pages 34 and 35, *Optical Truths*. Whilst it is proper for the Ophthalmologist to send in his prescriptions corrected, yet the manufacturers of optical goods and spectacles make the correction if he does not. It shows ability and understanding to have work done and orders all sent in as they are to be worn by the patient, and the record kept will show for itself, should it ever be needed. No one should pretend to prescribe for another without first knowing how, and to be fully prepared, it is better to take a course of instructions under or of a competent teacher. A prescription simply to see better is an easy thing to make, but much harm is done through the use of glasses haphazardly prescribed and used. It pays to do a thing right always.

Inasmuch as thirteen inches is the usual distance for reading, when we make a correction for a hyperopic condition, or to arrest nerve waste, and find that the patient needs additional strength to his glasses to read that distance, we prescribe additional lenses, which, being added, make the glass of three diopters strength altogether. Instance: If we shall have examined a case and find the following prescription is needed, and we wish to add for reading, this example will explain how it is done:

Left Eye, + 1.00 + 0.75, axis 90
 Right Eye, + 1.00 + 1.00, axis 90
 Add + 2.00 for reading, would be
 Left Eye, + 3.00 + 0.75, axis 90
 Right Eye, + 3.00 + 1.00, axis 90

Prescription for distance:

Left Eye, - 3.00 - 2.00, axis 180
 Right Eye, - 2.50 - 1.50, axis 180
 Add for reading, it would be thus, to equal + 3 D.:
 Left Eye, - 2.00, axis 180
 Right Eye, + 0.50 - 1.50, axis 180

Sometimes the addition for reading makes it necessary to transpose the prescription; according to the law of prescription writing, thus:

Left Eye, + 1.00 — 2.50, axis 180
 Right Eye, + 2.00 — 4.00, axis 45
 Add + 2.00 for reading, would be
 Left Eye, + 3.00 — 2.50, axis 180
 Right Eye, + 4.00 — 4.00, axis 45

which would be technically incorrect; but putting it on the cross and analyzing it, we have it thus:

Left Eye, + 0.50 + 2.50, axis 90
 Right Eye, + 4.00, axis 135, for reading—added when reading.

It should always be remembered that after the distance vision is corrected, the additional for reading is always made with spheres, and the added lenses must be of equal power, and that the amount added for reading depends upon whether the accommodation is totally or only partially gone. The only object of the additional lens is to supply the power the patient is unable to perform. Never add less than one nor more than three plus for reading.

OVER-FOGGING.

When a glass is so strong that it becomes a source of annoyance, it should be weakened. For instance, we find that a certain strength glass completely overcomes all the hyperopia, and seems to be just the glass we ought to prescribe to cure the affection for which it is designed; but the patient complains and will not wear it. What is to be done? Arbitrary rule in such cases excites opposition, and would provoke opposition that would utterly fail of success—in fact, would drive the patient from your office to some one else. Now, what is the right thing to do? It is easily settled. Either persist in enforcing the arbitrary mandates, or modify conditions by lessening your strength of glasses to be worn, and then after a time increase their strength, or let your patient go and remain uncured. This is not only politic, but absolutely proper and right, for some people are so extremely nervous, and so determined, that they want to feel that they have a right

to their ways sometimes, and it is proper and right they should. Ascertain as near as possible the temperament of your patient, and see that you obtain all the conditions as nearly as possible, and learn the knack of "fogging" the mind as well as the sight when necessary, but remember that everything and everybody has a "limit angle" in this world, and that circumstances should always be considered.

It will be found that some cases have been wearing minus glasses, prescribed by oculists or opticians, because the patient was made to see better through them, and hence they were given the minus glasses, when really they were suffering from headaches, and were hyperopic. In such cases, in order to bridge the chasm, begin with weak plus glasses, and examine eyes frequently, and gradually increase the power of the lenses until the difficulty is overcome and the proper glass is prescribed to absolutely do the work intended. These cases are not very frequently found, but are sometimes, and they must be dealt with kindly, or our object may be thwarted and a deserving person fail to get the relief needed. Do not be arbitrary when no good can be accomplished by it. Don't be a bantam, assuming that all the territory there is belongs to you.

TO TEST ASTIGMATISM—BY THE NEW METHOD.

Direct attention to the astigmatic chart, and require the patient to tell which line is the plainest. If there is one, it indicates astigmatism and that the meridian at right angles to the plainest line is the one corrected by the sphere. To prove this, put the slot on that meridian and have him read the smallest letters possible, then reverse the slot and vision should be worse. If it is, hold weak spheres in front of the slot, increasing the power gradually until vision is almost as good as in the other meridian; then substitute a cylinder of the power indicated, for the slot, placing the axis on the meridian where the slot showed the best vision through the sphere. To test the correctness of the cylinder, first direct the attention to the astigmatic chart and let the patient tell whether the lines are all equally distinct. If the ones which were plainest before are still most distinct the

cylinder is not strong enough; if the opposite ones are plainest, it is too strong. If he says they all appear alike, reverse the axis, and if that spoils the equality of vision on the chart, put its axis back where it was, refer him to the letters again and take a $+0.25$ cylinder in one hand and a -0.25 cylinder in the other, then try them alternately, the plus first and then the minus, axis on axis; if vision is just as good with the plus, the minus cylinder in the frame may be reduced; if it is not as good try the $-$ cylinder, and if it improves vision compare it with a -0.25 sphere, when, if the sphere gives best vision, the original cylinder is proved. In the latter instance we do not reduce the sphere, as appears to be indicated by the improvement in vision, but wait until the other eye is finished, when the accommodation may relax a little more, making reduction of the sphere unnecessary.

There are cases in which the cylinder, being -0.75 or less, may be stolen from the eye without impairing vision on the letters, although the astigmatic chart will not be perfect. The manner in which this is done, is to remove the cylinder from the trial frame, holding it in one hand, and alternating it with a -0.25 sphere in front of the eye, and if vision is best with the sphere, of course the cylinder should be discarded; or if a $+0.50$ sphere gives better vision than a -0.50 or -0.75 cylinder, we often discard the cylinder.

SOMETHING THE PUBLIC SHOULD KNOW.

Never permit anyone to put medicines in the eyes to dilate the pupils. They are injurious, and almost always do harm, and are of no use so far as an aid to find the amount of hyperopia is concerned, and make vision difficult for days afterward, and if used often sight is made worse. The method of examination recommended in this book obviates the necessity of dilating the pupils to correct vision; or finding the amount of latent hyperopia, or manifest either, for that matter. We give you this warning not to use it. We have seen too many cases made blind for life by its use. The only exception is:

TO DILATE THE PUPIL IN CASE OF IRITIS.

Two to four grains to one ounce of distilled water, and one or two drops of this solution dropped into the diseased eye every four to twenty-four hours, or often enough to keep the pupil dilated—so as to prevent adhesion of the iris to the anterior capsule of the lens—or to tear it loose if attached.

SPLENDID SIGHT AN OBJECTION TO WEARING GLASSES.

That is just the reason you should wear glasses. The seeing objects so distinctly requires an extraordinary amount of nerve force to do so, and that nerve force, or power, is expended in the effort to see; and sooner or later, the amount used to see so well is what reduces the general stock of nerve power—and is sure to end in disease, or a breakdown of the whole system. The lack of nerve power is a fruitful cause of sickness.

The rays of light which enter the eyes as parallel rays, do not require an effort to see; but when there are oblique rays to be shut out, in order to see, the nerve power which is used to contract the pupil, to shut out the oblique rays, exhausts nerve power in the nerves which end in the ciliary muscles, and that is termed nerve-waste.

That effort continued, from day to day, is what reduces the system—exhausts the nerve power of the whole body, and is the cause of much of the sicknesses complained of by so many people.

The eyes may not be affected at all perceptibly, for they may show no signs of weakness, but to the contrary, and the patient will stoutly protest the idea of wearing glasses. Some will absolutely refuse to wear glasses, saying, I can see well enough, and do not need glasses, neither to aid vision in seeing at a distance, nor near objects; and yet these very persons may have some chronic ailment and be invalids for years, without knowing that the loss of nerve power, through the use of their eyes, has caused the ailment.

Many a school boy has suffered through all his school boy days, simply from strained, overused nerve power, in his effort

to see well, and been an invalid before his schooling was consummated—and lived and suffered with some chronic ailment the balance of his life, simply because his doctor did not know anything about the cause of his trouble.

With these facts staring one in the face, would it not be well to consult someone who knows what the loss of nerve power is, and its damaging influences are, and have the proper correction made which will husband the nerve power, and bring health and happiness to the sufferer, whoever it may be—boy or girl, or even those of riper years? The husbanding of nerve power is an essential, to prevent, as well as to cure, diseases—especially those of a nervous origin (and all are).

Be sure to see to it that the waste, through the eyes, is arrested, and the proper correction is placed on the patient, and worn, and you will save much suffering, and restore to health and save many already nervous wrecks from untimely graves. The importance of this advice cannot be over-estimated.

The individual or family, who ignores the above advice shows a degree of irrationality that needs the strongest censure. The means suggested, in this book, to relieve the afflicted, have been thoroughly tested, and those who have taken the treatment have given it the very strongest endorsement, and have been snatched, many of them, from untimely death, and enjoy the blessings which accompanies good health.

The use of medicines will be seldom resorted to, when the science and philosophy explained and illustrated herein shall have been studied and applied. It will be found ample to meet the requirements in the large majority of the sicknesses and complaints of suffering humanity. It is the most rational, easiest and surest method of accomplishing just what the afflicted wants, of anything now known.

The forces in the body, when properly co-ordinated, will be found sufficient to carry on every function in the body, at all times, in all places and for all people in all time.

Its philosophy is absolutely correct; but its method of application may be bettered. The nervous system is the media through which all bodily functions are performed. The mind

expresses itself, everywhere in the body, through nerve filaments—hence harmony. The uninterrupted and normal nerve elements are essential to the harmony—to health.

Were it not that so much depended upon a healthy condition of the eyes, we would not introduce this science to the consideration of the public.

It is said that the eye, as a mechanical instrument, is deficient in its construction.

Were it not for certain arrangements inside of the front part of the eye, one could not utilize this organ as an instrument of sight. It being long in some heads and short in others, and having varied shapes, yet following the general contour in all eyes, it must be known that, but for the nervous system which controls the size of the pupil, one would find that sight would not even be an apology; yet it is perfectly adapted to the purpose intended.

Its anatomy can be studied if one desires to know its construction. The sole object of this department is to show the reader what factor is involved in the construction and use of this organ as regards health, and why disease results from overuse of this most wonderful organ. Results of applying this science correctly will astonish the practitioner more than anything ever imagined. The most marvelous consequences are the products of a proper application of the principles herein set forth. It will cause the heart of many a sufferer to rejoice with inexpressible joy. It will restore the sluggish child to health and a desire to be something in the world. It will stop the nerve-waste which causes insanity, mental wreckage and imbecility. It will arrest many a condition which would soon end in dissolution from nerve exhaustion. It will cure the little ones of enuresis, restore the cross-eyed to normal vision. It will cure most cases of epilepsy, headache, dyspepsia and constipation—and fill in as an indispensable helper in all nervous troubles that humanity suffers from.

ACCOMMODATION A SOURCE OF EYE STRAIN.

It is stated by oculists of renown, that eye strain or accommodation is the result of convexing and relaxing the lens—to focus objects on the retina—so that swelling the lens makes it stronger in focal power. This they call accommodation—and say that, by this means divergent rays are focused upon the retina as well as the parallel rays were for distance and that when younger this change is made easy.

We are inclined to the opinion that there is much hypothesis about the above philosophy of accommodation, and are inclined to favor the idea that accommodation is wholly an act of the ciliary nerves—resulting in the closing of the pupils in order to shut out oblique rays of light—or to focus them on the sensitive, or yellow spot—as it is called—and not a fixing of the focus by contraction and relaxation of the lens.

If we squint the eyes and shut out all oblique rays, our sight is improved for the time being, or as long as we keep out the oblique rays. Hence the only effect of a lens is to focus the oblique rays, and has nothing to do with parallel rays whatever.

When we consider the weakness of the capsular ligaments, we will wonder how pulling on them has any effect upon the expansion or contraction of the lens.

The strain is removed from the ciliary nervous system by the use of the proper lens in front of the eye.

The emmetropic eye is the standard of sight, and the design of the use of lenses is to bring the vision to this standard. The vision is called 20-20ths, and all healthy eyes are regarded as filling this measure. If one sees better, hyperopia is said to exist. This means far-sightedness and is accomplished at the expense of an unnatural strain upon the ciliary nerves which control the ciliary muscles—in the effort to open and close the pupil. The latter condition of the eye must be corrected to enjoy perfect health. The science of Ophthalmology which does not have this in view, does but little to aid suffering humanity in being restored to health, when this condition exists.

This being the source of the majority of ills, through eye

strain, it should receive the special attention of the healer—as one of the factors to be strictly attended to, to cure.

OPHTHALMOLOGY—REGARDING ITS SPHERE IN THIS BOOK.

Our aim in presenting this department is simply to correct *one* condition—and that is eye nerve strain. The principal thing to be done in this science as a means to an end is the arrest of that condition denominated hyperopia. This is all that we need to arrest the nerve waste through the eyes, causing so much distress, denominated disease. It stops the waste through the eyes, or the nerves which end in the eyes—in the muscles involved in the accommodation.

If a condition, in the body anywhere, exists, caused by exhaustion of nerve power through the eyes, that condition will be remedied when the nervous system is restored to its normal condition. It is found, by actual practice, that in the correction of the hyperopia, which can only be done by wearing the proper lenses, that the diseased condition subsides.

No better proof need be furnished. The cause of the trouble being eye nerve strain, and nerve waste through the strained eyes being arrested, there is a return to a normal condition. It makes no difference what the condition is in the person complaining, nor of how long standing, nor however severe it may be, whenever the nerve waste is arrested, the disease subsides, and harmony in the entire body ensues.

We have not written an exhaustive disquisition on the eye diseases—in fact, have said but little about the diseases of the eye, and have not said anything about physical optics.

If anyone wishes to take up the study of Ophthalmology in all of its details, we refer such to specialists whose business it is to teach it.

The people who care to make themselves proficient as eye specialists in all regards, should attend lectures on Ophthalmology, study it from every standpoint necessary to do the work—anatomically, physiologically, physically, mechanically and pathologically.

Our sole aim in introducing what we have in this book, is to

qualify the student to be able to correct errors of refraction that have to do with the eye strain causing disease.

THE INTRINSIC AND THE EXTRINSIC MUSCLES OF THE EYEBALL.

There are six muscles which surround the eyeball, and are inserted into the sclerotic coat, which are for the purpose of holding the eye in place, and directing its movements so as to produce that condition we are wont to call convergence. Convergence means that relationship to objects which makes it possible for the object seen to be directly in a line in front of the pupil so that the rays from the object shall be imaged on the retina—that portion of the inside of the back portion of the eye which photographs objects so as to be recognized—in form, size, shape, color, etc.

The two eyes, when sight is in both, are concerned in imaging objects on their retinas; and on this account the muscular system, that is, the six muscles surrounding each eye, are required. These muscles are so attached to the balls of the eyes, that they turn them in all directions—in, out, up, down; and to do so, some of them are contracted and others relaxed. All these motions require a certain amount of nerve energy; the amount of energy depending upon the use of the eyes.

A normal exercise does not require much nerve power, but when the eyes are required to be fixed in a certain position, instance, looking at near objects for a long time, the nerves ending in the muscles especially involved in the steady gaze, become exhausted, give out, or too much stimulated, a strain is the result.

If such strain is repeated too often and too long for a time, the eyes become what is termed strained; they become red, smarting, painful, itch, and are usually influenced by too bright light, photophobic-tired and sore. That condition is known as asthenopia. This is really muscle strain, and is often mistaken for another condition called hyperopia. The latter is due to muscle-nerve strain; but the ciliary (the intrinsic) muscles are the ones involved in hyperopia.

The outside muscles are involved in asthenopia, and have connection with the inside muscles only relatively. The one

group controls the amount of light admitted into the eyes through the pupils, and the other is involved in fixing the eye-balls in position to enable the light to fall directly on the maculae of both eyes.

The extrinsic muscles are the four recti, the superior and inferior oblique. Their names indicate their special functions. These six muscles are supplied with, and their actions controlled and regulated by, different filaments of the nervous system—from the cranial system.

The nerve which is especially concerned in imaging all objects so as to render them visible, the photographing as it were, is the second nerve. It is divided into ten layers, and they constitute what is called the retina. Without this we could not see at all.

The ciliary nerves are especially concerned in controlling the size of the pupils and regulating the amount of light admitted into the eyes, as well as rendering the lens more or less convex, and thereby regulating the focusing of rays of light on the sensitive spot on the retina.

The filaments of the third nerve are said to end in and control the actions of the superior, inferior, internal recti, and the inferior oblique muscles. The fourth nerve controls the superior oblique muscle, and the sixth nerve the external recti muscle of the eye. (Each eye has a like anatomical structure and control.) The third set of filaments of the fifth—or tri-facial—controls the lids of the eyes. For a further and more elaborate description of the eye, see Anatomy.

THE TREATMENT FOR ASTHENOPIA.

This condition, asthenopia, is a strained condition of the nervous system ending in the several muscles of the eyeball, either one or more, or all combined, and causes pain in efforts to fix the eyes steadily in position to bring the pupils and sensitive spot on retina in range of the object to be seen. Both eyes must be brought in position that parallel rays coming from a distance and centering on the sensitive spot of the retina, in order to see objects clearly.

If the rays of light do not do this, there is either double vision, or the object is only seen by one eye. The effort necessary to fix the rays of light so that the object is seen with the two eyes is called convergence. This feat is accomplished by the extrinsic muscular system.

It should now be clearly seen that too long continued effort to hold the eyes in one position would necessarily strain the nerves involved—and produce that tired, strained condition termed asthenopia. Whether the nerve power be lost through the effort to see, and only averted by the use of the proper lenses, or through an effort of the extrinsic muscles in efforts to hold the eyes fixed in a certain position steadily for a given time, it matters not which, the nervous system involved demands attention and must be righted before ease need be expected.

Whether, as some suppose, the correction of the refraction in hyperopia, or myopia, will arrest the difficulty in both conditions named, or whether a different treatment should be instituted, or the different set of muscles involved, whatever does the work is the thing to be done. It has been our experience that treating conditions caused by an extra use, or exercise, of one set of nerves, will not always correct the difficulty caused by nerves ending in other muscles; and, for this reason, we would advise whatever cures.

Some noted eye specialists claim absolute relief from all nerve waste or nerve strain in both internal as well as the external muscles of the eyes, by the use of glasses, while others meet the conditions with separate treatment.

There is certainly need for correction of the refraction in all conditions involving the internal or intrinsic muscular system, and nothing but the use of the proper lens will answer the purpose.

The condition called asthenopia, being a consequence of strain of the nervous system ending in the extrinsic muscles, may subside with the correction of the hyperopia. These terms, hyperopia and asthenopia, being used to denote the same condition—nerve exhaustion from overuse of the organs of sight—

both being involved in the effort to see, we may be able to relieve both conditions by using the remedy for the hyperopia.

It is a proven fact that many cases of asthenopia have been cured by simply exercising the muscular system of the eyes with graded prisms at stated periods daily, where no hyperopia existed, or where it slightly manifested, and when the asthenopia was cured the hyperopia disappeared. This especially prevails in persons under twenty years of age.

Whatever the condition of the eyes may be, the diseases caused by the nerve waste through strain of either the extrinsic or intrinsic set of muscles, it will not down until the nerve strain is relieved. The name of disease is not what is to be treated, but the conditions resulting from the strain are to be changed by arresting the nerve strain—stopping the waste. The above delineation will suffice as an index to the natural means to cure all conditions called disease, no difference where it expresses itself in the body.

The physician and patient will have cause for rejoicing when this philosophy is carried out, for all conditions being due to nerve disturbance, it is *the remedy par excellence*.

SOME FURTHER CONSIDERATIONS ABOUT THE EYES.

There are certain so-called oculists and opticians who test refraction with a view to benefiting the vision, that is, to make the individual see better than normal, and often use minus lenses, when plus lenses should be used; and all for effect upon the mind of the patient, supposing they have to *please* to get approbation or favor of the patient.

The manifest hyperopia should always be corrected, and if a little more, it does better than not to quite correct the hyperopia. While the latent need not be looked after for the first prescription, if all of the manifest is corrected, it won't be long until more plus can be added, and bring the vision up to the twenty-twentieth line of vision, and so the latent may be gradually brought out and corrected without annoying the patient by "fogging."

So far as the "fogging" to test the eyes is concerned, it is

best to do this, for it is the surest and the best way to correct all of the *manifest hyperopia*. If a little misty vision is experienced right at the start, the sight will clear up in a few days, and be all right; so that it is best to place the correction on patients, and inform them that such might be the case—but to be sure to wear the correction and report within a week and see whether the correction needs changing. The emmetropic line (20-20) should be read dimly, as a rule, each correction, and then you may be sure all of the manifest hyperopia is corrected. The various complaints due to eye strain will be overcome by this process of correcting the vision; and it will scarcely ever be necessary to “fog” back to a dimmer vision, as is practiced by many now-a-days. To make one myopic is just as bad as to leave him hyperopic. The strain, to focus objects on the retina, is the very thing that strains—and what we tell our patients we are trying to arrest. Let us be true to our word and not overdo the other way.

The patient will be inclined to discontinue the use of his glasses if you “fog” him too much. *Your explanation for over-fogging him will be of no avail when he wants to see.* He will see over, under or around, to one side of his lenses, and then feel no benefit from their use. It is, therefore, better to *just barely keep within the limit of his forbearance*, and then favorable results may always be expected and realized.

The larger percentum of *eye troubles* come from some error of refraction, and the irritation being removed by stopping the eye strain, the eye trouble subsides. This is not only so as regards the eyes themselves, but so of almost all the other ills of humanity, mental, as well as physical; for when there is perfect equilibrium everywhere in the body there is a condition we denominate health. The nervous system being free, harmony prevails throughout the entire body.

GRANULATED EYELIDS.

Inasmuch as many are afflicted with sore eyes, and have tried the methods in use for relief and failed to obtain it, I would not feel exempt from duty were I to neglect to add to this book a certain method of curing sore eyes, whether acute or chronic in character. Ordinary cases will get well from correction of errors of refraction, as per the instructions in this book ; but some cases of granulations, with pannus, need the following treatment one to three times a week, viz. :

Insert the forefinger into the outer canthus of the eye, then place thumb on outside of lid ; squeeze lid, and with a shambling motion and pressure move toward inner canthus, squeezing the lid hard enough to feel the granules give way under thumb and finger as they pass along. Then bathe eyes in a solution of table salt, from a tablespoonful to as weak as a teaspoonful to a pint of water. There may be a few drops put into the eyes two or three times a day, and if there is a condition of acute inflammation, use the solution of salt and water over both eyes in the form of cloths wrung out of the solution, repeating the application every few minutes. This should consume from a half to one hour each sitting, and once to three times a day. If very painful, use hot water ; otherwise cold water is sufficient in ordinary cases.

In the squeezing of the granules, be careful that the finger is kept pulled away from the cornea, for the cornea should not be rubbed by the back of the finger in this kind of treatment. The stretching or pulling the upper lids of the eyes relieves all pressure in cases of corneal ulcers, and will absolutely cure them without the use of atropine. This instruction is worth everything to the victims of granulated eyelids, for there is no better remedy known to man. Do not fail to have the cause, hyperopia, removed, and that not only takes off the strain from the eyes, but stops the waste

from the whole body, and cures other complaints and conditions as well. This philosophy is far-reaching. This treatment, with a little common sense exercised, will accomplish wonders!

THE TREATMENT FOR CHRONIC SORE EYES.

Trachoma, or granulated eyelids, are a source of much discomfort, and frequently end in blindness, and a remedy which will absolutely cure this condition should be hailed with eclat by the afflicted, and even by the physician. Things reliable are what we want now. The same measures cure corneal ulcers as well, and most certainly in all cases.

The process is as follows: Let patient be in a recumbent posture, on the back is the best; and now, after the operator has thoroughly cleansed his hands and fingers with soap and water, let the forefinger be inserted under the upper lid, as far back as may be under the tarsal fold, holding the lid between the finger and the thumb; let squeezing be commenced at outer canthus (outer side of eyeball), gradually moving thumb and finger toward the nose, and lifting lid upward and away from the cornea as the pressure is being made on the granules of the upper lid, and as the finger approaches the inner canthus, turn ball or palm of finger toward nose, and press quite hard against the inner corner of eye a moment, on *lacus lacrymalis*, and this last pressure cures pterygium as well. The above treatment should be done every other day for a few times, then at longer interval until patient is cured.

If there are follicular nodules or soreness under lid, insert forefinger into inner canthus, patient looking upward, and skin below lid being pulled down, the finger is easily inserted; then let pressure be made against the lid as it is pressed against *malar orbital* plate. This should be readily understood, for the main thing in this procedure is to press the granules and stretch the lids — take off the pressure — so that nature can restore the parts to harmony. To free the circulation and remove pressure are the objects of the above. The application of a solution of common

table salt, one tablespoonful to a pint of water, should be applied to the eyes half an hour at a sitting, one to three times a day; it cures all acute or chronic sore eyes. The same strength snuffed up nostrils three times a day cures nasal catarrh, if persisted in for several weeks, six to ten.

DISEASE EXPRESSES ITSELF IN THE EYES.

In pursuing the study of the eyes I find that the most marvelous revelations appear of anything I ever studied. To think that diseases located anywhere in the body express themselves in the iris by changed color and rings, circles, lines and varied shaped signs is the verification of what we have long known—that the entire body is controlled by mind, expressed through nerve filaments.

Whatever the nature or stage or origin of the diseased condition be, the impression is shown in the eyes, showing without doubt the absolute proof of the fact that the tracings, not only of violated law mar the body and leave their impress in unmistakable signs, but the health is also expressed in color as well, so we are enabled to read the positive and negative phases in every human being in all ages, and even trace the effects of his mentality, anger or joy in the eyes.

The foregoing statements being true, one should readily understand that it is of the greatest importance to keep the nerve filaments free from strain or pressure all the time to have health expressed in every end filament in the entire body. The proper breathing, diet, exercise and environments should receive due attention. The right kind of thoughts should be maintained and a due regard for harmony should be considered and acted out in every-day life, and firm trust in, and obedience to the Supreme Ruler of the universe should be our constant aim and purpose in life. Harmony in the body should, at all times, be maintained that happiness should be ours to enjoy all through life, to a good old age, and die like a gentle zephyr as the sun recedes behind the western hills, sending its gleaming rays athwart the heavens, and sink to rest as the shock of corn fully ripe for the harvest—and be gathered home to the land of ever-

lasting bliss, leaving a goodly inheritance of a well-spent life while here on earth.

DIAGNOSIS OF DISEASES BY THE IRIS.

To the ones interested in learning how to diagnose conditions of the system accurately, by physical signs manifested on the iris, the book published by the Kosmos Publishing Company, 765 North Clarke Street, Chicago, Illinois, and written by Henry Edward Lane, M. D., will find what he wants in that line fully discussed and delineated.

This is the most accurate method of diagnosis from a physical standpoint that has ever been published. It becomes most intensely interesting to the reader, and doubly so to the one interested in arriving at a correct understanding of what diseases rage in the body and the exact tissue involved. There is a science about this method most wonderfully accurate and interesting.

It is a matter of importance to know what is ailing the one to be treated, sometimes, and the amount of damage being done, or likely to be done, tissue involved, etc., and thereby get a clue as to what to do to remove the trouble, or arrest its progress and remove, if possible, its cause. This furnishes the keynote to unravel the mysteries of disease in a way untaught before.

The remedy recommended is a medicine, but homeopathic and harmless, and often the one which meets the necessity.

So far as medicines are concerned, the homeopathic approaches nearer to science than any other medical system, and supplies the molecules with the element needed in a way that changes conditions and harmonizes the entire body with itself.

We have no prejudices to insinuate, but believe in all things which do good, and are opposed to everything which may, or is likely to do harm; emphasizing the fact that the system advocated in this book has a sphere unoccupied by any other system known. The arresting the waste, removing the strain and stopping the irritation, adjusting the system to itself, and freeing the nervous system does more and quicker work, than any other means ever devised; and yet we are not opposed to agencies

which neutralize the poisons and remove the accumulated waste material and thus give nature an opportunity to assert itself, and aid the entire system to harmonize itself in every part and organ in the body. The individual who will lay aside prejudice and act rationally at all times is the safe individual to care for and doctor the afflicted. We recognize the fact that the best means of restoring health, and maintaining it in all climates, is right living. The abuse of one's life and then trying to correct it with medicine is a sad mistake.

FILMS OVER THE EYES-PANNUS, ETC.

Mix a half pint of lime water with a quarter of an ounce of verdigris, and steep for one hour together; then strain it through two or three thicknesses of clean cloths and bottle it for use.

To use: Apply by means of a feather point or some very small point so as to just touch the film over the pupil, or on the speck to be removed. Apply it once a day. It may take two months to cure it.

To cure Chronic Granulated Lid and Pannus.—Apply at night, leaving it on all night, and slice of beef's liver over the eyes. This cures them in from ten to twenty nights. The most remarkable remedy known for that condition.

REMEDIES FOR SORE AND INFLAMED EYES.

The application of raw beef's liver—thin slice—put on the sore eye at bedtime and kept there all night is a sovereign remedy, and cures the worst cases in a week or two, generally. Use it every night, and then bathe the eyes two or three times a day in salt water, a tablespoonful to a quart of water.

ANOTHER EXCELLENT REMEDY, AND SPECIFIC IN SOME CASES.

Put one tablespoonful of Glauber salts in half a wash bowl of water, and put the head and face—or at least the face down into the water and wink the eyes, in the water, or take less quantity of the same strength and do the same way. Wash the entire eye thus in the solution twice a day, and use raw beef's liver on lids at night, and the worst cases will soon be well.

For all eye strain, the use of properly fitting glasses is essential, for the strain causes many cases of sore eyes, and the proper glasses worn constantly during wakeful hours stops the strain and the eyes get well.



SPECIAL CONDITIONS IN OBSTETRIC TARDINESS OF LABOR.

The use of the nervous system will be most admirably adapted to lingering cases of labor. We presume that those who use this method of treatment will have had some knowledge of the mechanism of parturition, a knowledge of the anatomy of the female pelvis, and what is taught in regard to the various steps of the culmination of parturition — child birth.

Whilst nature unobstructed and conditions favorable, labor proceeds without difficulty, it is a fact that, in these times of artificial deliveries, forceps and other contrivances, we have some very peculiar phenomena in the course of some labors which baffle the skill of the most experienced and best accouchers. We present a means, a procedure, which if followed will regulate the pains, changing the “wandering pains” to normal expulsive pains in the right place, so surprisingly that it will astonish both doctor and patient, centering the influence of the nervous system in the fundus of the uterus, relaxing the os-uteri, and within a few moments labor will proceed naturally to a favorable terminus, preventing or obviating the prolonged state of useless pain, and righting all conditions at once, so that no more trouble need be anticipated, changing a protracted case into one of promptness and ease. This same treatment will be as effectual in placental expulsion as in parturition.

It should be understood that child-bearing is a natural process, and should be without unnecessary pain, protraction, or complication, or danger. Now, having thus premised enough to inspire confidence in the mind of the accoucher, we proceed to explain in detail the method of procedure, but will first inform the reader that the nervous system controls all muscular action, and that the nerves regulate the whole process of labor in every

case, except the artificial removal of foetus. These are absolutely mechanical and artificial, and we have nothing to say or do in such cases. There is a leash of nerves ending in what is known as the clitoris, situated above the orifice urine, at what is termed the forchet, and may be felt at that spot, and it is what produces the orgasm in coition, and it assumes a rigid condition when very slight friction is used with the finger on it, producing a thrill over the whole body more or less pleasurable or painful, depending upon condition of female. This is the leash of nerves which controls uterine contraction and relaxation.

To secure natural bearing-down uterine pains during parturition, place the first and second fingers at and on the sides of this organ (the clitoris) and press gently, firmly, upon it, with an upward pressure, stretching the integument, with clitoris somewhat tightly, upward, holding the fingers thusly for five to fifteen minutes, and you will begin to effect the conditions. Pains will begin to center in the uterus, in the fundus, and the mouth of the uterus (os) will begin to open (dilate), and a desire on the part of the patient to incline to press toward her pains; and advancement will at once set in, and delivery will be natural, easy and speedy. This procedure (pressure) need not be over fifteen minutes, but should the influence seemingly cease, it may be repeated. This same thing may be done in case the after-birth is tardy, or there should not be pains or contraction in uterus sufficient to expel the placenta.

Postpartum hemorrhage may be at once arrested by the sudden jerking of a wisp of the hair on the mons veneris of the one flowing, and it will usually cease in a moment or two. This is done reflexly, of course, and is another means of demonstrating the control of the nervous system over the entire body, righting all wrongs when free to act.

It will be understood that some more nerves enter into and end in the uterus than any other organ in the body. That is the organ in which the human being receives nourishment for a period of nine months of its embryonic life, and the nervous system ending in that organ is especially concerned in fitting it

for the various conditions of that period. It is a marvel of itself! Think of an overruling Providence of such marvelous wisdom to adapt such a creature as man to such environments (and the same may be said of other creatures) as shall furnish the human being with pabulum, bone and muscle, and faculty to come forth at a set period, ready to begin life among environments entirely different, and yet be adapted to them, grow, develop, and become a mover in the great world of living mortals! I shall not write on this theme, and merely say this to have mankind continue to reverence his Creator as the supreme in wisdom, power and love above all created intelligences.

SPECIAL INSTRUCTIONS TO CONTROL PROGENY AS TO SEX.

It is a fact in history that Jacob, of early Jewish history, became extremely wealthy by causing his cattle to be ring-streaked and speckled by observing certain fixed laws at a special time in the life of the cattle, as recorded in the thirtieth and thirty-first chapters of Genesis, to which the reader is referred. It will be observed that in order to have strong and healthy progeny they must come from strong and healthy parentage; therefore, when females are the product of copulation, it will be observed that coition took place soon after the monthly sickness of the female, and if commerce be made during the latter part of the inter-menstrual period, the result is males are produced. This rule, observed absolutely, controls the sex of the progeny. Immediately after the menstrual functions there seems to be, and is, a weakness of nerve power in the organs of the female, and to conceive at that time, the sex of the progeny will be of the weaker, gentler sex; and when connection takes place at the latter part of the inter-menstrual interim, the organs being strong and the nervous system having had time to gain strength, the stronger sex is the result of the copulation. Inasmuch as God has made both male and female, he has established fixed laws for their government under all conditions and circumstances, and it is our province to study his laws, and to know and to observe them, that

we fulfill the object of our creation and always profit thereby. The union of the sexes was ordained for the special purpose of propagating the species, and God has bound man and woman together by indissoluble laws we dare not meddle with or change without producing chaos and every possible evil as a consequence. When man and woman becomes "mated" according to natural law, happiness is the consequence; but when united simply to gratify "lust," inharmony is at once inaugurated, and misery comes as an avalanche with relentless fury. "It is better to be right than to be President,"



BREATHING A NECESSITY.

The breathing is done largely through the organs called the lungs. The spaces are called cells. These are six-sided prismoidal openings, accessible at one side, and into these spaces or openings the air is received, which comes through the nostrils, and in these cells the oxygen of the atmosphere is received. The blood vessels are distributed throughout the lungs and surround all these cells, and the thin septum permits the carbonic acid to pass out and the oxygen to pass in. This process is a transference of the one element, oxygen, to the blood, and the carbonic acid from the blood, doing in this act what we denominate "purify" the blood. There are about seventy-six millions of these small cells in all of the five lobes of the lungs, and the blood can only be purified by oxygen, hence the necessity to breathe through all these air cells at all times, if we keep the blood pure. This is the most important act of our lives, and to live long and be well, we must breathe through all these cells without fail. A failure to do so means your blood is not purified as it should be — you are diseased.

DEEP BREATHING.

There are so many and varied notions about breathing that we are almost persuaded that many have forgotten that by breathing we "live, move, and have our being."

The so-called scientific instructors in breathing have divided the exercise into three processes, or three methods, to-wit: Thoracic, abdominal, and diaphragmatic. The truth is, there is but one way to breathe, and as breathing involves the diaphragm, stomach and thorax, an attempt to differentiate and emphasize one phenomenon more than the others savors of extreme ignorance of the instructor in physiology. Breathing properly means to fill

all the air cells, and this should be done every breath breathed, and the air should enter the trachea and pass out through it—through the nostrils every breath—and enough air inhaled every time to fill all of the air cells, for it requires this to “purify the blood.” Nothing short of this does it. Breathing should be done fully, naturally, and not otherwise. The special methods of inflating the lungs will be described as we proceed.

That there is a necessity to breathe there can be no question, if one desires to live. It need not concern the intelligent as to what is said about “purifying the blood” by this or that compound; there is but one thing which can possibly purify blood, and that is oxygen. The organs of inspiration (the lungs) are adapted especially to the function of breathing, and there are about three score and sixteen million of spaces (cells) which are especially adapted to this process we call breathing, around which are distributed channels which carry the blood, and in these channels the air, containing oxygen, is brought in contact with the blood as it circulates throughout all the various cells in the lungs. The breathing, the reception of air in the cells, is a provision of nature, and whilst the air is passing through these cells an exchange of oxygen for carbonic oxide takes place, and the venous blood undergoes a change from a dark to a bright red color. In proportion to the extravasation of air throughout the lungs in these air cells we have the blood purified, hence the importance of filling every part of the lungs as often as one breathes. The intercostal muscles, together with all of the muscles of the chest and abdomen, are properly denominated “breathing muscles,” which are concerned in expansion and contraction of the chest walls, hence called “respiratory” and “expiratory” muscles.

Having said this much, we desire to state that the breathing is a natural process, and one of the acts which demonstrate the actuality of life, for without breath there is no life. Ever since the first man, when “God breathed into his nostrils the breath of life and he became a living soul,” to the last man born, and all along down the ages, man, to live, has had to breathe, to live. Seeing that breathing is of so much importance, we urge the necessity of knowing how. That man must breathe, and that he

must breathe air, being a settled question, and that air is the only thing essential to life, it becomes more interesting as we investigate, for we are dependent upon this process for the conversion of the fluids of the body into a condition to make living tissue, to get rid of waste material, and renew the old as well; and as all this must be done to perpetuate life, it becomes a matter of vital importance to all.

There are many extravagant theories about breathing this and that way, but one thing has never been questioned: man must breathe to live. That to breathe is natural is a settled fact; then the question comes up, Why do not all breathe naturally? At first thought this may seem to be an easy problem to solve. That it is not solved is apparent and evident, for book after book has been written, and much difference is manifest as to how one ought to breathe.

To simplify the manner and eliminate all superfluity of language in presenting the proper method of procedure in this all-important act, we submit the following, which we have found adequate to the purpose intended, the prolongation of our mortal existence. Having had about seventy years' experience along this line, it may be all the evidence needed to satisfy the most incredulous, and having had much experience in the enjoyments accruing from proper breathing, we proceed at once to instruct the reader in what we have found to be satisfactory, to us at least. For one of our years, one seeing our physique would be convinced that we have had a very satisfactory experience along this line, and that the probabilities seem favorable for our being able to breathe some time yet, and demonstrate the fact that there is something in the how to breathe to rightly perpetuate life, and at the same time be in a state we call health, simply from the fact that proper breathing has been the order of our life.

The secret is that we have permitted the air of heaven to enter our lungs, without using any force to prevent it, or opposing the entrance by any forced position of body which had any opposition to the effort demanded by nature to fill the lungs with the air demanded. This is an act which every one ought to be strictly informed concerning, and always observe. We are aware of the

fact that many do not breathe properly — that is, fill all the air cells with air every breath — and that the nervous system, the spinal nervous system, is impinged, or interfered with in such a manner as to interfere with the action of the respiratory muscles, and absolutely prevent normal breathing. This should be duly considered, and no one should be expected to breathe naturally under such circumstances nor whilst in that condition. But all things being favorable, and the nervous system being free, all the muscles being properly supplied with normal nerve influence, we advise the individual to sit erect, being at all times unstrained,— that is, relaxed,— close the mouth, letting the air enter the lungs by way of the nostrils, inclined to straighten upward, and shoulders backward, and the lungs will fill with air, and the chest walls will expand; the diaphragm elevated and the shoulders bent slightly backward, and the chest walls inclined upward and forward. In this condition every air cell is filled with air.

The expulsion of air is as much a natural process as its inflow, and should always be through the nostrils, avoiding that foolish habit of forcing the breath through the mouth. The Lord made the nostrils to breathe through, and for any sensible person to think of keeping half of one of God's commands is reprehensible. This is one of the most important subjects which can occupy mortals on earth. The Lord will attend to the breathing on the other shore, but here we shall have to do our own breathing or cease to remain here.

That one can ward off disease, abort many incipient diseases, by breathing properly is a well settled fact. By long, deep inhalations at oft repeated, short intervals one may relieve conditions which, if neglected, may result in almost any disease, such as colds, pleurisy, pneumonia, colic, or any other disease. Remember that pure, oxygenated blood is essential to health, and that breathing purifies it. Standing erect, both feet flat on ground or floor, standing in an unstrained posture, erect, with arms hanging by the side, head erect, shoulders inclined backward slightly, mouth closed, now gently inhale until the lungs are filled with air; hold this air in the chest; now close fists tightly, stiffen every muscle in the body as rigidly as possible, draw the arms upwards,

bending the elbows, drawing them upward and backward as far as you can, then all at once let the arms be thrust downward with considerable force, and at the same time letting the air go out of the lungs through the nostrils. This may be done four or five times at one sitting. The last process is one of immense importance, for it is applicable in the promotion of a free flow of blood to the lungs, and hence its purification, and it warms up the whole body. Sitting erect, or standing either, straightening up, closing the mouth, inhaling through the nostrils, and letting the air be forced out suddenly through the nostrils, is a means of relieving many conditions called disease that will surprise one who never tried it. Five or six times at a sitting will be amply sufficient for any case or condition, but may be repeated at intervals of one to three or four or more hours apart.

To relieve one's self of the blues, fear, melancholy, or despondency, take in long, deep breaths, and then force the air against the diaphragm, repeating this five times, and all such difficulties cease at once. This is easy to do, if you will incline to force the abdomen down as well as out whilst the air is being forced out through the nostrils. This is worth millions to the human race, and is the greatest boon ever given to the public. Remember that it is your privilege to breathe, and you may enjoy all its benefits if you have a mind to just reach forth and take it. It is your privilege to "occupy the land" if you will, and health, happiness and prosperity will be yours while you live.

THE KEY TO LONG AND HAPPY LIFE.

Never satiate the appetite with food, and only eat the kind of food which agrees with you.

Avoid much cold water or cold drinks. Avoid too much exposure to wind or sunshine. Take moderate exercise, and breathe throughout the lungs.

Eat but few articles of food at one meal, and avoid worry, anxiety, and excesses at all times. Be temperate at all times. Love God and keep his commandments, and length of days, with unalloyed happiness, will be yours to enjoy in this life, and the assurance of eternal life when done with earth.

SUPPLEMENTARY.

When the air is permitted to permeate every lung cell—fill the cells—there is a healthful condition of the blood. The breathing is the only agency in nature which purifies the blood. The blood remains impure when it is not oxygenated.

It is said that there are about seventy millions of air cells in the lungs and about ten millions of pores in the skin, and air is brought into contact with the blood through them.

Breathing properly, filling all of the air cells, and keeping the surface of the body clean will cure almost all conditions called disease. In fact, there would not be disease if the matter of breathing was thoroughly understood and practiced as it ought to be. This may seem strange, but the healthy people in all past ages have been those who breathed enough to keep their blood pure. Many now rely upon breathing exclusively to cure all diseases.

The larger per cent. of people now-a-days use only about sixty per cent. of their lungs, so that forty per cent. of their lungs is not used. The results are apparent; for the people who do not breathe properly are the people who are always complaining of something being the matter with them. These furnish the doctors employment, and never get well.

The healthy people are those who utilize all their air cells in breathing.

The nostrils are the orifices to breathe through—not the mouth. It should be a maxim with everybody—*always breathe through the nostrils.*

To breathe well and easily, the body should be erect, with shoulders a little back, and all the clothing should be loose, giving perfect freedom to the chest and abdominal muscles.

The breathing should be done naturally, not strained; nor should the lungs be fully expanded suddenly. Begin by gradually filling the lungs, and increasing the amount of air and the expansion of the chest muscles gradually, holding the air in the lungs a few seconds, then letting it out gradually, taking a little

more air into the lungs next time. Increase the quantity from time to time as the lungs will bear the new order of things.

The muscles surrounding the chest are called the respiratory muscles. The gradual filling of the lungs with air expands the chest walls, relaxes the muscles, and gives more room for the lungs to expand. A tightened, drawn condition of the muscles which surround the chest, interferes greatly with breathing, in full expansion of the lungs, and expansion is essential to the reception of the air in the lung cells.

The muscles of the abdomen are also involved in lessening the capacity of the lungs. Remember, that the only office a muscle has is to contract; therefore, it can readily be seen that when the muscle-fibers contract we have less space in the cavity they environ.

The gradual increase of air into the lungs, and forcing it down against the diaphragm, has a very perceptible controlling influence in loosening up the muscles, and when followed up daily, several times at a sitting, the breathing will be accomplished without much effort.

Imperfect breathing becomes a habit, and most people have not been informed of its deleterious consequences. They have not been accustomed to look into the matter at all; therefore, the many short-breathed, weakly, faint, sickly people everywhere. These may all get well by adopting a systematic course of breathing exercises—daily, frequently.

After a few days of drilling, gradually filling the lungs with air, one becomes confident of returning vitality. The blood circulates better, is better in quality, and every tissue is renewed, and returning force is taking the place of weakness, and health returns, making glad the heart

The breathing should be sufficient at all times to fill the entire lung capacity, whether lying down or sitting up or standing.

The breathing promotes a freer circulation of blood throughout the entire body, fills the capillaries with red blood, warms the body and drives out waste material, relieves pain, and cures many

conditions with a rapidity that seems astonishing to the one afflicted.

Colds, pleurisy, pneumonia, headache, as well as many other conditions, are relieved by the proper breathing—persisted in for a few moments at short intervals—as can be borne by the sufferer.

The carbonic acid gas in the blood is exchanged or eliminated, and oxygen takes its place. The carbon dioxide, or impure blood and waste material, are eliminated as the blood goes its rounds through the lungs. This is nature's process of purifying the blood in the entire body. There are no agencies in nature which purify blood except oxygen—not one.

The individual who takes medicine to purify the blood is losing time and is deceived.

No mixtures ever devised by man have any potency which purifies a single drop of blood in the body.

Breathing then becomes a necessity—is a necessity, always was, and always will be in order to purify the blood.

We would emphasize this proposition with *heavy underscoring* so as to attract attention to its importance. It is the *sine-qua-non* as a curative agency. It is the agent itself. It is the means—and the only means—by which one can be restored to health, for there can be no health when the blood is impure.

The reception of air into the lungs, every cell, becomes essential. The importance of breathing should interest everybody, for the oxygen purifies the blood.

Halfway breathing is not sufficient to answer the purpose—full, deep breathing is what ought to be done—must be done, to keep the person in health, or to restore health when lost. It will be understood that as our blood is, so is the tissue made from it. Healthy blood, healthy tissue. Poor blood, poor structure built therefrom.

To be freed from any and all conditions called disease, we must breathe into every lung cell and keep the blood pure at all times.

A restoration to health may be assured to every individual who maintains this course—full expansion and filling the lungs—

all its cells, often enough to purify the blood in every lung cell as it circulates through the lung tissue.

When all else has failed to cure any given affection, deep breathing should receive special attention.

The effects of proper breathing can not be over-estimated.

In all cases of worry, anger, remorse, fear, jealousy, dependency and excitement, the blood is more or less contaminated—poisoned; and deep inhalations, frequently repeated, holding the full breath in the lungs; then press the lungs down against the diaphragm suddenly, letting the air out of the lungs, through the nostrils somewhat forcibly, several times, relieves all such conditions readily.

The purified blood must circulate to effect favorably.

The inhalation of air into the lungs starts all the forces to moving in the body, but we should remember that the nervous system is the *one factor* in producing the peristalsis—the vermicular, onward movement of the fluids—including the glandular secretions as well.

The various movements of the limbs, separately and conjointly, as well as the various movements of the body, tend to increase the circulation, forcing it through all the channels.

Physical culture has a place in procuring correct forms. Every muscle increases in size and weight by exercise. This is because more blood is forced into them. Hence exercise, with that in view, is a healthy exercise if not carried too far. Abnormal development usually follows unnatural exercise.

That every part of the body grows by exercise and the faculties of the brain are developed by exercise, is a settled fact; hence all growth is due to exercise. The exercise should be such as to develop the whole man, soul, body and spirit. A healthy condition is maintained by exercise. Physical training has been practiced, as a means of procuring health, for many years; and when every movement has a proper relationship to the natural movements of the body, that is, not to strain the muscle fiber, the results will be beneficial, always.

All movements are beneficial in proportion to their relationship to the organization of the body. To be beneficial they must

be properly executed. Awkward, strained manipulations are injurious.

The mind must be in what one does to make it effectual.

The exercise of all the muscles of the body may be attended to at regular stated periods as best suits the individual—stretching, forcing, relaxing and breathing—so that freedom of the circulation and development may be made as desired, but should be done with a will, having an object in view at all times—the betterment of the entire man.



MAGNETIC HEALING.

That there is a power within man which correlates itself with his fellow man is commonly believed, and we are wont to call that power magnetism, and recognize it as in some way connected with our physical relationship as a positive and negative force, and having to do with harmonizing or inharmonizing, or both, with ourselves individually, as well as attracting or repelling individuals, and through one person controlling or modifying the actions and conditions, relations, and state of others. It, like all things not understood, has engaged the attention and dominated the thought, to a greater or less extent, through all the ages, and has been utilized as a curative agent of the various affections of humanity for all time.

Some have called it "inherent electric force," some recognize it as a sort of "magic power." Like electricity, its power is limited only by the media through which it is sent, and the quantity, the measure, used. It is capable of being generated, multiplied, to any degree, and so directed as to produce effects almost, if not absolutely, as desired. That there is a magic in it, about it — a magical power in it — the one at all informed of its effects readily admits, and often stands aghast in profound surprise in the presence of its effects upon human beings, for the deaf have been made to hear, the blind to see, the dumb to speak, and the lame to leap as a hart, from its application through the hands of the one imparting it! No force is able to resist it, for it passes unmolested through any and all substances, and has been the convenient messenger sent on missions of mercy across sea and land to abodes far remote to bless, soothe and fan the fevered brow and make glad the lonely exile. It fills all space, penetrates all substances, and may be used as the messenger on all errands, for weal or woe.

The withered limb and the aching head have alike been

soothed to tranquillity through the **benign influence of this potent agency**, the most diffusely spread over all nature, and yet the least understood and, because so common, least utilized, the world always looking for help in things containing no power, and only effective through this wonderfully mysterious agency. It baffles all skill, puts to silence all pretenses, and silently does its work nevertheless.

The application of this mighty force may be made at any time, on all occasions, and for all mental or physical conditions, and its influence directed to the cure of all diseases. Whatever other agencies are being used, this applied outweighs them all in satisfying results, for whatever measure used, this, though not considered, has its influence pro or con, and a disregard to or ignorance of changes not the facts in the case! An influence which can be felt, one which can be directed to any locality, and which can be forced into the human body by the "laying on of the hands," the pointing of the fingers to a given locality, or sent in fragile substances for hundreds of miles, and have the potency to relieve pain, should not be ignored. That it may be abused, unintelligently directed, misapplied, argues not against its merits. To be able to utilize such an agency for good and intelligently should be the desire of all people, to a limited extent at least, and scientifically by all pretended healers. It is always convenient, always present, always applicable, under all circumstances.

The two forces are recognized in the application of this power, the positive and negative. It may be applied in large or small quantities, slowly or rapidly, painfully or soothingly. The Neuropathist may use it, the Osteopath need not ignore it, and the Masseur should regard it as essential in his manipulations; the mother uses it to soothe her restless infant, and tranquillity reigns wherever its benign influence is diffused. That it can be used to the betterment of humanity is apparent to all who will consider, reason, think, study, observe. It may be applied suggestively, thoughtfully, and materially; so its convenience is admitted. That we use it in every-day life, ignorantly, no doubt, in most instances, is unquestionable. It may be disregarded as a potent agent in the healing art by many, but the fact remains as incontrovertible as that fire burns, that it has its influence, and that a mighty influ-

ence. Those who have spent their entire professional lives applying it are some of the world's best healers, and it grows in favor as it is more known in any community, among all classes.

It is stated by good authority that ninety-nine per cent. of the ills of humanity can be readily relieved by the use of and proper application of this wonderful agency, magnetism. Headache in every form is relieved within a few minutes by its application, and may be cured by a few applications. Goiter, a condition of the thyroid glands, characterized by hardness, enlargement, engorgement of venous blood, and deposits of detritus from impeded venous blood, yields readily to a few treatments of the magnetic healer. Paralysis, locomotor ataxia, tumors, liver, kidney, and all other affections, have been seen to suage by this influence. Constipation is readily relieved and cured by its influence. Uterine troubles, ovarian as well, have no power to resist the influence of magnetism. Liver, spleen and lung affections are amenable to it. Asthma, hay fever, nervous affections of every form and variety, are curable by it. So we have a means always at hand to relieve suffering humanity, if they will only avail themselves of it in time, before the "limit angle" is reached.

To apply this force we must use the hands. The right hand should be considered as the media through which the positive force is applied, and the left hand the negative. If we understand that pain is driven from the right hand to the left, we should place the right hand over the painful spot and the left hand opposite; we at once influence the character of the pain. It is driven towards the left hand, the negative, and neutralized. In all the treatment we should never fail to use the positive hand over the pain and the left hand directly opposite, and should use the right hand in a quivering motion over the locality from whence we desire the pain or disease to go.

When we wish to fill the subject with the magnetic power, we should point our closed fingers to that spot, either against or very close to the part, holding them there for a few seconds. The vibrations of the right hand seem to be effectual in influencing the parts in all the treatments given everywhere. Holding the hands

of the patient is a potent means of imparting to them the magnetic power, taking their right hand with the left, and *vice versa*.

HOW TO PLACE THE HANDS.

Let the operator be seated in front of the patient, taking hold of the hands, right in patient's left, and left in patient's right, thumbs pressing gently between the third and fourth knuckles, on ulnar nerve, gently for a few seconds; willing an influence from the right hand (of operator, of course) to pass the entire circuit of the hands, and the influence will be felt by patient very readily; then place the fingers of the left hand at back of the neck, at the base of the brain of the patient, thumb on one side and fingers on other side of spinous processes, gently pressing and holding position with left hand, and with the right hand or fingers vibrate anywhere else where there is pain or disease for a few seconds or moments, changing the position of the left hand along the spine, as the front parts of the body are being treated by the right hand, with the vibratory movements.

The treatment of goiter may be done by operator standing behind patient and treating with both hands, using right hand on right side and left on left side, pulling both backward, over and outward over shoulders.

MAGNETISM—A CONCISE METHOD OF APPLICATION.

That there is efficacy in magnetism experience has fully demonstrated. We have not the space to elaborate on the different ways it may be used nor to write an essay on it, but feel assured that the reader will be amply remunerated for reading this short disquisition, because of its relationship to health—the relief of pain and its power over the human body, and its influence for good. The advantage is that one has the commodity right with him, and all he wants, to use it, is to know how, and then results follow; so let this concise method of applying it suffice.

Magnetism has been used from ancient times, all down the ages, and in modern times the science has been used as a

healer by many; and since it is an agency which permeates all substances, and when directed properly with a view to healing, it exerts a wonderful and salutary influence for good, in many conditions, which other means do not change.

We will not discuss the theory of magnetic healing but submit a simple method of applying this wonderful power. The reader will please understand that opposite parts of the body have the most magnetic power on one another; hence, the right hand on the left one and the right foot on the left foot, and *vice versa*; and the strokes are always to be made in a downward direction, as magnetic influence is imparted that way.

The downward strokes or the laying on of the hands—placing the right hand on or over the part where the pain is, or where the influence is to be exerted, and the left hand in an opposite direction, or on some other part of the body. The current is transmitted from the positive (the right hand) to the negative (the left hand). The long strokes are made with both hands—with the fingers partly bent and drawn from head to feet—on either side of the body, within about four inches of the sides, or in front or back of the body, depending on where the influence is to be exerted. The patient should be seated on a wooden chair or stool, in front of the magnetizer, both bare-footed, the patient's feet resting on the feet of the magnetizer. The hands of the magnetizer are placed on the head or abdomen of the patient, who, in turn, places his hands on the knees of the operator, and in this position both should rest quietly for about five minutes. This brings both patient and operator *en rapport*.

The Strokes.—The magnetizer holds his hands over the head of the patient, region of the heart, or abdomen, for about three minutes, and makes what is called the long stroke—which consist in moving the hands in a straight, downward direction to feet, on both sides of the patient—and as soon as the *hands* of the *operator* reach the floor they should be *shaken* in a manner to *throw off the influence from his body*—and the strokes are to be repeated fifteen or twenty times, the hands being carried back in a circle.

The local treatment consists in short strokes; laying on of the hands or breathing on the parts pained, or closing the fingers together and holding them pointed near to the place where the pain is felt, or by circular movements over the painful parts, with crossed wrists, and after a few such strokes, the hands may be slowly taken apart and the long or short strokes made as above described, and these movements should be made seven or more times, and when the last stroke is made downward, the operator should gently grasp the right ankle of the patient with the left hand, and the left ankle with the right hand, till he feels the pulsation of the blood vessels in them under his hands.

The duration of the treatment should be from three to ten minutes, or until the hands of the magnetizer begin to sweat, which is a good sign of favorable effects.

During the treatment there should be no disturbance in the room, or the attention drawn from either patient or operator, and if the patient should go to sleep during the treatment the waking up may be easily accomplished by reverse strokes—breathing on the eyes, or speaking the name and telling to wake up. This has the advantage of not doing any harm, and many conditions yield with astonishing rapidity. That an influence is imparted through the ends of the fingers any one can have a verification of by trying it, or by having someone else try it. Holding the open hand on the painful part and the left hand on the opposite side, will relieve pain in a few moments most generally.

The magnetic treatments may be made daily or oftener, and almost every condition known to afflict humanity is benefited by this marvelous agency—many chronic ailments and seemingly incurable conditions have been known to be cured; so that we should not ignore any means which is natural to relieve the afflicted at any time.

This treatment has the advantage of all others: that of being able to give it at any time and under circumstances when other treatment cannot be given. Chronic ailments are amenable to magnetic influence, and this, with suggestion, may be used whenever desired.

We believe that the conditions, where possible, which obstruct the free action of the nervous system, or obstructs the circulation of the fluids of the body, or irritates the nerve filaments, should receive first and special attention—and then we have no objection to using any other means which lessen pain or harmonizes the body with itself.

This means does not antagonize any natural means of relieving suffering humanity, and all agencies which tend to ameliorate suffering, which is harmless, we heartily endorse. The body being a cosmos, it should be studied in all of its relationship with all other things in the world, for it is a combination of all the elements in nature—earth, air, sea and skies—and possesses soul, body and spirit, and expresses everything there is.

Study, learn, know and use this when indicated or needed on any and all occasions.

THE PRODUCT OF THOUGHT AND THE RESULTS DESIRED.

That we are the product of the way we have thought verifies the assertion, "As a man thinketh so is he." We too often fix our minds on objects which, in and of themselves, have such limited bounds of outcome that the thought ends in smoke, and we get nothing for such devotion. We assume much in this world that has neither reason nor sense in it, or likely to come of it, that life glides away and nothing is accomplished.

The thoughts are themselves products and come from suggestion from outside of us. The combination of the human faculties is such that thought is conveyed through them. Sometimes a subtile influence, unfelt or unperceived by us, influences the senses when there seems to be no reason connected with it, even while asleep, and culminate into an idea, and that into words, and these bring other faculties into play, and these may have an influence in directing a train of thoughts which, for a time, control our actions. Think about this as we may, we are controlled by the way we think, whether the thoughts come from perceptible suggestion or through subtile influences.

DIETETICS.

While it is said that "what is meat for one is another's poison," it would seem that a book would be deficient without something being said about diet; therefore, we are constrained to say that a very large per cent. of the ills of the flesh are due to the manner and time of eating, rather than what is eaten. The "stuffing process" every few hours, or the "piecemeal" habits of adults and children, and the manner of preparing food, are all subjects deserving careful consideration; then, the manner of eating is of the greatest importance of all. The food should always be thoroughly cooked. It should be thoroughly masticated, and the stomach should be duly rested before it becomes the receptacle for food. No food should be eaten between meals. Eating should be considered a means of regenerating exhausted nerve and tissue waste, rather than simply a gratification of the taste. To get pleasure out of eating, it must be done leisurely, for it is the taste that affords enjoyment, not the idea of how much can be crowded down the throat into the stomach; then eat slowly, to enjoy the food while it is passing through the gateway to the regions beyond. It is always better to leave off one meal from the regular habit of most people, preferably breakfast, then dinner will be relished, digested, for the recuperative powers of the secretions will have been rested, food will be assimilated, appropriated, and the nervous system restored to normal activity, and vigor will take the place of exhaustion and sluggishness. The mental faculties will be clearer, and nature will reassert itself through all of its domain in the whole body, including every tissue therein, and many a disease pronounced hopeless will begin to wane and finally fade away into buoyant health. The "fad" advertisements for "anti-fat treatments" will find no place for those who are wont to take on "adipose," but every man and woman will be natural. Then, in the case of acute illness, as long as the tongue is coated, the taste is unnatural, foul, do not allow a morsel of food into the stomach until natural appetite demands it, which will be when the tongue cleans off, and then disease will have ceased, and food will be relished, assimilated, appropriated.

REGARDING FOOD DURING SICKNESS.

To suggest a change in the programme of diet from what has been the custom during illness at once excites criticism. To properly appreciate the importance of food, we should first know the condition of the system as regards ability to assimilate it. To introduce food into a stomach that is sick, unable to digest it, seems insulting to the digestive apparatus, even to a common observer; but to one pretending to know the conditions necessary to its digestion, assimilation, would seem superfluous. That patients have been fed to death in an effort on the part of their friends, and often at the suggestions of the physician, abundant evidence could be furnished; hence to arrest or checkmate the sin of "over-feeding" hereafter, we write the following: Do not feed your patient until the disease is cured, in all acute affections; and in all chronic affections be sure to give the digestive organs rest at least fourteen to eighteen hours during the twenty-four, if you would cure them of their diseases. A rest of a day or two by your chronics will be fraught with wonderful results in favor of recovery. To do without breakfast, drinking plenty of water, either hot or cold, will produce a favorable change for the good of the patient in restoring energy to the digestive organs. The patient will not starve by any means as long as the tongue is coated, and when that cleans off, there will be a natural demand for food that will be the most satisfying, perhaps, that the patient ever experienced. The mouth will fairly "water for what the system needs." Remember that "nature makes no mistakes." To crowd the stomach or impose labor upon or in it when unable to perform it, would be called cruel in us if applied to any other tired, run-down, worn-out laborer, wouldn't it?

In cases of acute disease, the system goes on a strike, as it were, and the laborers at rest; no "designs on the Trestle Board," and all is confusion—it's "high twelve," and the sun is at meridian height; the confusion reigns supreme, and to interfere results at times in death. If we did but know that the digestive organs were powerless to do duty when disease has sway, we would surely act in accordance with reason, let them be until they recuperate their lost power. The whole system is a unit,

and when one part is out of gear, all is disturbance. Settle the commotion first, then it can eat its meat "with gladness, and with singleness of purpose," to build up more vital fluid.

Remember that acute as well as chronic diseases lose their grip when the digestive organs are let alone until there are demanded in the system more rations to replenish the waste. Let nature assert herself in her own way. The tongue will clean off and the mouth will become moist, and the stomach will receive the food with a relish, long before the period of starvation sets in. Give the patient plenty of water, suited to the conditions. One glass of water for every ten or twelve pounds of flesh (or weight) every day, will satisfy the demands, whether in summer's heat or winter's cold. This quantity is sufficient to hold in solution the inorganic material and wash away the debris.



OSTEOPATHY ILLUSTRATED.

FUNDAMENTAL PRINCIPLES.

It is a fairly well established fact that physicians regard the administration of drugs uncertain in their effects in the treatment of disease. The chronic affections uncured, and by drugs incurable, demonstrate to a certainty the unreliability of their action as curative agencies. The presumption that drugs act in some mysterious manner, and have a special affinity for diseased structure, finding their way to pathological parts, unite with a particular form of diseased structure, wrest its progress, hurl it from its moorings, and leave the parts cleansed, purified, swept and garnished, healthy, is an untenable and untrue premise to assume, the results failing to justify.

To assume that anybody needs anything but the normal elements to maintain health is to distrust perfection in creation, and to regard foreign substances as curable or in any respect compatible when diseased is to assume a theoretical improbability, for the restoration of the normal constituents of the body restores the balance of power caused by deficiency of elements. Restore the elements, and health is re-established. The freedom of the circulation of all the fluids of the body restores vitality.

That any one of ordinary intelligence should presume to assert that humanity is a machine, or that any one should compare a man to a machine, is surely not to be considered tenable nor applicable, yet he is composed of all the elements that go to make up all the machinery in the world, but

is not a machine in any sense whatever. The comparison is ridiculously inconsistent, to say the least of it, for he embraces every element in nature, rising from the earth, containing mineral, vegetable, animal, and reaching his acme in spirituality—controlled by a divine mind, acted upon through a set of cords originating in cranial centers, conducting the divine impression to the remotest atoms in the farthest-off locality in the various apartments of the house we live in, called the physical body.

That mind formed this wonderful structure, that it permeates every part of it, that this mind is conveyed through tubes we call nerves, and that through these nerves supervision—or the mind through these nerves regulates the manufacture, absorption, the assimilation, elimination, and every chemical change necessary to the conversion of the food eaten into the various tissues, bone, muscle, etc., is not questioned at the present day. But to assume that the body is a mere machine, is surely begging the question and mocking Deity.

The marvelousness of the science of the adjustment of the system to itself, and the complete and sometimes the almost miraculous change produced in the tissues through the application of the principles of Osteopathy, place it in the front ranks as the most stupendous fact of the nineteenth century. The practitioner is often appalled to witness the results. To the Osteopath, whose eyes have seen and whose hands have figured in producing these wonderful changes, it is commonplace, but to the one who has thought it possible to cure disease only through the administration of medicine, such a result—the relief of pain, the cure of long-lasting ills—by a simple adjustment of the system, by a slight manipulation or move of a muscle, it becomes astonishing!

The philosophy of curing disease by this science is simple, rational, certain, safe. The human system is composed of sixteen elements. These elements are derived from the food eaten and the water drank, and the atmosphere that surrounds him. All these various elements are manufactured



PLATE I.a.—First of General Treatment.

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and made ready to assimilate as they pass through the various tubes of which the whole structure of man consists, changing from the one element to another, according to the supply and demand in the various tubes through which the food—the blood—passes. As the blood passes from the heart and enters into the arteries, thence into the capillaries, certain elements are given off through the walls of the capillaries, entering the surrounding tissue, taking the place of the used-up tissue which is drawn into the lymphatics, to be ushered into the venoles, thence into the larger veins, mixed with the various debris, including all of the chemical constituents from the various tissues of the body, pushed onward into the right side of the heart, thence thrown into the lungs, to again undergo chemical changes—to be renovated, purified, cleansed, made over, then returned to the left side of the heart, thence to be carried through the arteries to every part of the system. And so on as long as life in that body lasts. The system possesses the power, being under the control of mind, to continue this same process every moment of time that we live. When there are no obstructions or interference in this natural process, health is said to exist. When every organ in the body is performing its function or functions in a natural way, we are not cognizant of pain or disease; but let any interference with the onward flow of any of the fluids of the body take place, a change occurs—chemical change. This change results in a disturbance of the molecules of the whole body. When the blood does not circulate normally, we at once recognize disease-producing elements somewhere in the body, and to the extent of the obstruction will be the result pathologically. To make this matter easily understood, to elucidate this subject, is the object of this book. If the reader carefully follows me in my delineations, there will come into his mind, and he will master the most marvelous science that the world has ever had presented to it. To take hold of a person, adjust the system in such a manner as to free the circulation of all of the fluids of the body, and through that process change all of the

chemical elements from an unnatural to a natural condition, seems incredible to the one uninformed. That this can be done is perfectly compatible with truth. No remedial system ever devised by man can boast of such a result. The larger percentage of the abandoned ills of the flesh yield to this treatment. There are no medicines necessary, neither does this book recommend drugs.

We have tried the various systems claiming to possess all there is in the healing art, demonstrated to our satisfaction that there is a better way to relieve affliction in the way of disease than is known by either of the medical schools, and that this book will contain the full and complete science of healing without drugs, and that no individual need falter to use it according to the instructions contained herein.

The philosophy concerning this method of healing can not be overthrown, and will be accepted wherever practiced, and by all who desire to be cured or cure others without let or hindrance. It needs no legislative bolstering up. It carries with it weight of evidence of its efficacy in every trial, properly applied. There is no harm or bad effects following a right use of this science, if used according to the directions given in this book. Each move or manipulation is shown and fully explained herein, so that nothing is wanting to make this work attractive and useful to the community adopting it, and the physicians will soon become its warmest advocates.

Osteopathy is a term applied to a particular process of healing wherein the bones of the human system are regarded as, in some way, factors in producing that condition called disease. This may be further defined by regarding the definition of the parts of the word itself, although strictly speaking, misapplied. The word *os* means mouth, bone, and is a symbol for osmium, a heavy metallic element belonging to the platinum group. *Osteo* is a prefix, signifying connection with or relating to bone, and *pathos*, the faculty of arousing sympathy, emotion, passion, suffering, feeling—disease. The most reasonable definition of the word is, resulting from

obstruction. Hence Osteopathy is a term that is used to designate pathological conditions, caused by the interrupted flow of the fluids of the body, or pressure due to contracted muscle or muscles, or irritation of nerves or nerve centers, paralyzing nerve function.

This may be better understood by stating that disease is the result of partial or complete stasis of the fluids in general or particular, anywhere in the body, and the result, name or nature is wholly due to the parts or tissue involved.

That disease should result from pressure, and that a physiological condition can be established by taking off the pressure, seems hard to believe, after having had centuries of instruction otherwise. Any discovery out of the ordinary receives little attention, especially when old ideas are deeply rooted and become a part of ourselves. To presume, in the face of long established, time-honored methods, stereotyped customs, that we are "weighed in the balances and found wanting" in the real facts, starts up a feeling of resentment in us that knows no bounds, and we are ready to rise up in our strength, dignified manhood, and denounce it as an interloper, a fraud, unworthy the consideration of intelligence, and are ready to stamp it out of existence, were it possible, simply because it does not comport with our long-cherished views. This has been the history of mankind in all of the ages past. Humanity is the same now it always was, and any new method or principle out of the common course of events must expect opposition until it proves itself worthy a place in the archives of established usages—becomes a necessity, in harmony with general thought. Then, if truly meritorious, the *new* acquisition takes place alongside of the great mass of material that the world regards with complacency. That Osteopathy should be an exception in this regard should not be presumed. We do not anticipate miraculous transitions of mentality all of a sudden, but we regard this step as one that is greatly in advance, deserving of more attention, based upon stronger claims, more easily understood, far more efficacious in results,

decidedly more in line with reason, philosophy; and fraught with better satisfaction than any method, or all of the means, ever devised or used by professed scientific men, or the various schools, in any or all of the ages past, in relieving humanity of physical sufferings or pathological conditions—and that, too, in the least harmful manner. This will be found true after you shall have completely mastered the science and applied it to the various and multifarious pathological states recognized as disease.

Whilst we are greatly obliged and truly thankful that Dr. Gowers classified the action of the nervous system, and that Dr. A. T. Still first promulgated to the world the possibility of complete or partial dislocation of bone or bones producing pain, disease, yet we are not willing to concede to either one the honor of originating or developing the philosophy of cure to its present standing, or application to the cure of disease. Necessity, in this science, as in all other relationships in life, is the mother of inventions. When it is considered that those who assumed the premise that *all* diseases were curable by the application of Osteopathic principles, it required more than one brain to formulate and devise means or improvise manipulations adaptable to the various pathological conditions found at various times in the human system—all of them presenting different symptoms, different pathological states, in different parts of the body, in different climates, latitudes, in different races, at different ages, and in different temperaments, involving altogether different structures. It has taken no little time, much thought, a fair understanding of the system, anatomically, physiologically—with much patience, a host of *patients*, labor, comparison, will-power, mechanism, and perseverance by many minds—to demonstrate the exact status of this science. This is, then, the result of a combination of mental, as well as physical forces, formulated and systematized so that it can be reasonably explained and elucidated and applied as a means, and in most cases of cure, that is, to say the least of it, surprising.



PLATE I.*b.*—Continuation of Plate I.*a.*

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The *how* it does it seems to be the hardest thing to show the mass of people. That they should demand it—an explanation and a perfect elucidation of its workings—is a greater mystery than the science itself. They gulp down any sort of a “bolus” from other doctors, and never for a moment think of asking a reason; “that is medicine—we are used to it—it physics, pukes, or relieves pain”—that is all the patient desires. But let some one propose to relieve pain, cure disease, by a mechanical process—adjust the system to itself, take off the pressure, or remove the *cause* of his ailment—he is at once denounced as a quack, a fraud, unworthy to do business in a civilized community; and persecuted, maligned, insulted, prosecuted, and that, too, by the very men who, if called upon to “give a reason for the hope (of a cure) within them,” could not do so. We are not shooting at random along these lines, for we know whereof we affirm, and claim to be able to demonstrate the efficacy of the practice of Osteopathy, and to know that medication, as it is understood, practiced, applied, is not comparable in any respect with Osteopathy. That there is efficacy in certain elements, and certain antidotes to poisons, we hesitate not to affirm, and that there are times when these should be used; but that there is power in medicine to cure diseases seems altogether untenable, unphilosophic, unreasonable and unnatural. Our practice for years has proven the utter fallibility of curing disease by the use of drugs. Elements supplied, when needed, should be done as you would supply food, not as a medicine—in no instance whatever.

It has taken thirty-five hundred years (since the days of Asa) to educate the people up to the idea that medicines taken into the system did in some way cure disease, notwithstanding it is said that “Asa, when he was sick, resorted to his physician instead of to his God, and he slept with his fathers”; and people for the very same reason have gone to BED too EARLY in consequence of resorting to physicians. There seems to be no let-up in that direction, and the people continue to

believe that medicines are essential to the cure of their diseases. To argue to the contrary seems futile. The dark pall that broods over the world to-day, the wand that holds in surveillance vile, and makes slaves of us all, rests in and originates from education along this mysterious pathway, and like a weird, spectral ghost, holds enwrapped in its strong and sinewy arms, with a deathlike embrace, every nation, race and tribe of people.

To lift the veil, to uncover and expose to view this mighty, time-honored custom, and with one fell stroke erase it from the pages of history, blot it out of the memory of man, and give it no place, and discard it as unworthy of further consideration, to declare annihilation, to end its ravages, seems herculean to say the least of it. The hardest thing to induce mankind to do is "to repent," to acknowledge their wrongs. It is so easy to float with the tide that we seldom make an effort to change our course, and the large majority of mankind float on down the stream, out into the great ocean of life, regardless and unmindful of how they do so. All down the ages men have arisen who have "moved the waters"—produced a ripple and started streams which have influenced the direction of the current of human thought; and these, like oases in the desert, created an interest that lifted the race a step higher. Great reformers in all ages have been the beacon lights that led the nations out of bondage. The discovery of forces, the union of substances newly discovered, the combination of elements unthought of before, have evolved results that bring us to a realization of our advancement, ascending higher and higher into a clearer light. This has been the case in almost every department of thought, except the restoration of our own bodies from physical ills; in this, stereotyped customs have engulfed the people for ages. While a knowledge of the structure of the human system has increased, its relationships with itself and the rest of the world, yet a scientific, clear, unmistakable method of righting our physical wrongs—in a word, curing our ills—

seems to have been sadly neglected, and in the strife to present something new, or to discover some "fountain of life" that would perpetuate existence, the results are confusion worse confounded, and the question still rings in our ears, "Is there no balm in Gilead, is there no physician there?" After all our experience, it is quite well decided that the so-called medicine theories are frauds. The uncertainties of the actions of medicines are almost universally recognized.

THE PHILOSOPHY OF APPLICATION OF THESE PRINCIPLES.

The reader is wont to ask, "How can you apply Osteopathy to the treatment of all diseases?" The very reason that the vendor of his "patent medicine" recommended it to the cure of all diseases, no matter of what character or type or stage, at once brought to mind the utter impossibility of its application in the cure of anything. While in the instance named there is but one thing to consider, and that is that disease is not dependent upon a supposed "materies morbi," that can be neutralized by a compound, or a single drug, but upon a series of causes that ultimately culminate in impediment or obstruction of the circulation of vital and other fluids in the *body*, that no compound or medicine can possibly reach, and that can only be removed by a physical effort on the part of self or some one else. This is the reason that there is such a wide range of usefulness for the practice or application of Osteopathy in the practice of the healing art. There is scarcely a pathological condition thought of, discovered to exist, or that ever will exist, wherein this science will not be usefully and necessarily demanded. It is kaleidoscopic in its application to the cure of diseases or pathological conditions. And while we shall have occasion to name a great many diseases, the application of the principles represented in this book will be apparent when once applied.

There are many things that we shall never know, and we shall often be astonished at results in our application of this philosophy, but the end will justify the means employed, if

properly done, and conditions thought to be incurable will be seen to change for the better as these principles are applied. To even relieve and cure a few cases of acute or chronic suffering would seem to justify the necessity of presenting this book, but when this is done without doubt, and hundreds of conditions are alike changed satisfactorily to both applicant and manipulator, the value of the science will increase in estimation, wherever known and by whomsoever utilized. It is not a "try system," and try again, but a *reliable certainty*, applicable in all pathological conditions, an aid at least in ameliorating the ills that "flesh is heir to" in mankind. The medical profession will soon adopt its philosophy, apply it in their practice, and often wonder why they had not applied it long ago. Results will satisfy all of its merit, and prejudice will wane as investigation progresses. It only needs proof of efficacy, and that will come by application, to convince the medical profession of the importance of this simple method of cure, and gain their hearty support of it.

THE ULTIMATE OR PHYSIOLOGICAL CONSTITUENTS OF THE
BODY.

When it is known that the "blood is the life of man," and that it contains sixteen elements, and that these are combined in various quantities to form the compounds of all the tissues of the body, and that but *three* of these, viz.: Oxygen, nitrogen and hydrogen, occur in their free state, it will dawn upon the reader that to be a proper physical being called man, these elements must exist in the body. The formation of these various compounds in the body begins in and is largely derivable from the food eaten. The manufacture of these elements from the food is superintended and controlled by the organic nervous system. This nervous system originates in the *head*. It is distributed all over, through, in, to, and everywhere in every tissue of the body. The circulation of the fluids of the body is under the supervision of this system of nerves. Culminating in large numbers, and terminating at



PLATE II.—Treatment of Side of Neck Muscles.

the upper and posterior part of the cervical region, they constitute the so-called "vaso-motor nervous system," and here we are enabled to start forces that control every artery, capillary and tube that convey fluid, throughout the whole physical organism, regulating even the action of the heart. This same nervous system permeates every gland, controls the secretion therein, superintending the combination of the various parts of the body, so that no "schism" occurs—that is, in a natural way. These various elements are manufactured from the food eaten, and made soluble, miscible, affinitized by the special direction and control in every part of the body by the sympathetic nervous system, having the sole management of the "house we live in."

To understand this essential department fully, thoroughly, simplifies every effort on our part to know the process of these unrevealed processes that are constantly going on in our bodies, and account for the repair and waste that constantly go on in this marvelous structure, denominated the "form divine." A system of healing, based on a knowledge of the various constituents of which this body is composed, a knowledge of each and every part; a knowledge of the laws governing its every change, the combinations of these various elements in every part of the body; the manufacture of this and that element and their especial part to be carried to and deposited in, so much of this and so much of that particular element, and to form each and every part in a certain form and maintain it in that form for "three score and ten years," is surely an interesting subject to study. And when we undertake to explain to the reader that disease exists only as a consequence of incoordination somewhere in the system with every other part, and to cure our ills by coordinating the various parts of the body with every other part, cures disease, and that without drugs, we are confronted with opposition of the fiercest character, and if we lived only two hundred years earlier, our carcass would receive the same fate as others have for even expressing simpler truths. Before we are

through with this subject we hope to make it so clear that all may see it in its true light. We must understand that the blood contains all of the elements. These elements are distributed everywhere through the arterial system.

When there are no obstructions, and the fluids of the body everywhere circulate, the nervous systems performing their functions normally, the changes occur naturally, and the elimination is not interfered with, is there any reason why that sort of a system is not healthy? But suppose undue pressure is made somewhere, that impediment to the normal flow of the fluids should occur, does it not stand to reason that there would necessarily be an accumulation at that particular part; that pressure would be at once produced right there, and if continued, increase, and that this would involve other structures in that neighborhood, continuing to increase and spread until there existed that condition we call congestion? If this same thing occurred in a stream of water, and the supply from above continued, what would we call it? A flood, wouldn't we? And suppose we raised the embankment higher, would not our fluid (water) accumulate until it covered all the country up to the very source of the fountain from whence it originated? This illustration is surely simple enough to be understood and comprehended by the simplest of observers. To further illustrate this simple, though unknown proposition by the masses (including many so-called physicians), we raise the curtain still higher and throw in a greater flood of light. Suppose this accumulation is in some important blood vessel?—what then? The accumulation would necessarily press against the walls of the vessel until expansion (dilatation) took place, and if in a vein we would call it venous congestion, or varicosity of veins. If in an artery, we would name it aneurism. We therefore unhesitatingly assert that almost every pathological condition described under the various names in all of our leading medical books is traceable to this state (barring poisons—and these do indirectly by paralyzing *nerve centers*, and these being unable to control mobility



PLATE III.—Stretching of Neck Muscles.

of the parts to which they are distributed, congestion ensues, and always in proportion to the centers involved). The importance of the circulation of all of the fluids of the body, from its introduction into the system until it passes out, can not be too highly considered, if health be a desideratum. The elements are held in solution in the watery fluid of the body, and this constitutes about seventy per cent. of the whole body. All of the inorganic compounds are held in solution in the watery portions of the blood.

The organic constituents of the body consist of urea, uric acid, xanthin, hypoxanthin, hippuric acid, kreatin, lactic acid, lecithin, neurin, cerebrin, leucin, tyrosin, and cholesterin. These substances are essential to the elaboration of cells. We could not exist without these elements. It is a strange, but singular fact, that the exact proportion or equivalents of these substances are maintained by supply and demand, and that all these constituents are divisible into proximate elements, principles and ferments, and that they are normally prepared in the body by the glandular system. Hence to furnish all of these elements, to keep up the supply, to distribute them to the various parts of the body where they belong, to build up this and that bone or muscle, due regard must be had to the proper adjustment of the system to itself, so that there be no undue pressure anywhere, to interfere with normal action of every part. The importance of these elements will become more apparent when the reader is informed that the offices of the various parts of the body are influenced wholly by the presence of these elements, and that the sympathetic nervous system superintends the manufacture of these chemical constituents from the material in the body itself, received through the food or the atmosphere by inhalation or absorption, and that the five hundred and twelve muscles of our body would become stiffened and immobile without that element called Kreatin. This substance contains carbon, oxygen, hydrogen and nitrogen, chemically combined in due proportion. Then, without Hemoglobin, there might be cir-

culatation of the fluids throughout the body for a time, but it would soon be without oxygen, for oxygenation could not take place without this substance. In order to have impulse through the nerves we must have that element called Cerebrin, and an essential to the communication of thought is found in Lecithin and Phrenosin. When we consider that six of the elements of the body are contained in Albumen, it is essential that there be an assimilation of it, but without Tyrosin and Leucin there would be none, nor would there be epithelial cells; and in the elimination of dead cells it is necessary that Xanthin be present. Cholesterin has for its office the supervision of the growth of young cells and the removal of old ones. The oxygenation of the cells requires the presence of Cystin and Sulphur, together with its preceding presence of Hemoglobin. Protogon assists in the assimilation of albumen, and Inosit is necessary to the fluidization of lymph and the flexibility of muscular tissue.

These particular and wonderful chemical constituents, all essential to the existence of man as he is to-day, are all evolved from the blood, and when all parts of the system are performing their proper functions these products make up the sum total of the physical organism, but when outside influences are brought to bear and new compounds introduced among them, untold mischief results, all due to incompatibility. This is the principal reason why medicines do so much harm, and why the true physiologist so persistently opposes them. The long-cherished theory that some peculiar materies morbi, acrid humors, malaria, etc., in the blood, cause disease, has no foundation in fact, and in the light of what we here assert and fully demonstrate, does not appear reasonable or possible. Theories must give way to facts. We most earnestly and respectfully assert that when every part of our physical system is properly adjusted, so that a perfectly free circulation of all of the fluids of the body, in the body, exist, we have health. We further assert that no sort of so-called Bacteria causes disease, and that they do not, nor



can they exist in healthy blood, but are found only in morbid, broken-down tissue, always the result of the impediment somewhere in the normal circulation of some or all of the fluids in the parts where said "bugs" are found. And we further assert that when a proper restoration of the circulation is brought about, the proper hygienic environments prevail, the poisons are eliminated. To clothe, to enshroud, disease with a mantle of mysterious morbid matter, and to theorize on mooted opinions, give us no satisfaction.

CAN THIS SCIENCE BE RELIED ON IN EMERGENCIES?

We would remark in the most emphatic terms, we have found it so for five years, after having tried all other means for over *thirty-five* years. We would not have the reader to understand that any and all methods combined are universally successful in averting death under certain circumstances and conditions, but we do say that, more than any other system now in vogue, known or practiced by anybody to cure disease, Osteopathy is nearer a universal means of relief and cure of the ills of the flesh than any other ever tried, used or employed. I especially emphasize the necessity of recognizing the tissue elements, for without them—which make up the body—all of the manipulations known would be ineffectual in curing diseases caused by lack of them.

That there is good in something else, and many things now in vogue, I pretend not to deny. That universality of application to every pathological state exists only in what is now recognized as Osteopathy, I pretend not to claim, yet the principles that underlie all remedial agencies do exist, and may be and are appropriate in all, there is no denying. The methods used are sometimes at variance with results intended, when, if *the how* to apply it were understood, results would be different—generally satisfactory.

Surgery occupies an important place in the treatment successfully of many pathological conditions, that many Osteopaths are wont to ignore or are wholly ignorant of. The removal of *nerve-depressing influences* require the knife sometimes, and should be recommended and surely used when necessary. Then nature is permitted to assert itself, and the result is a cure, when, if the operation had not been performed, the case would have continued. The egotistic dogmatist often manifests obstinate imbecility, to his or the patient's disadvantage. When it is fully understood that "taking off the pressure" is the text of our discourse, and that it is essential to a cure, the means will be used to do so in the best manner possible. The measures recommended in



PLATE IV.—Vibration of Neck Muscles, Patient Recumbent.



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this work are not mere experiments, but the result of matured thought and actual experience.

There are efforts made to write out what "Osteopathy means" by incompetent persons—men whose limitations are perceptibly circumscribed mentally, and the marks of deficiency, intellectually, show in every line, on every page, in every sentence; so that distrust, rather than confidence, is created in the science, when, if intelligence had stood out more conspicuously, Osteopathy would have, ere this, received respectable approval, whereas now its advocacy is regarded as questionable, simply because of its being practiced by such persons as are known to have no qualifications along the lines of the profession practicing the healing art. That is the most remarkable part of this science. Its application, even automatically, surpasses in efficacy other systems supported by the lore of ages! Yet, it is nevertheless a notorious fact that there is need of proper presentation of the great principles governing it to lift it up into the sphere of appreciative individuals, so that its good may be realized by all.

Books and periodicals are being written on this subject, and the masses will soon be in possession of the knowledge of the grandest science discovered relating to, and having for its object the cure of diseases, and that, too, without drugs!

WHAT IS OSTEOPATHIC TREATMENT?

We mean by Osteopathic treatment: The manipulation of the various parts of the body of the person who is afflicted with pain or disease, so as to liberate any and all undue pressure, such as over-contraction of muscles, pressure on a nerve or blood-vessel which, interfering with the normal circulation, produces that condition called disease. These, we contend, produce all of the various phenomena denominated Pathology. Whether the pressure be due to a partial or complete dislocation of a bone, contraction of a muscle, or muscular fiber of one or more muscles, the object of these

manipulations is to *free* the system everywhere, in every part of the body, so that perfect harmony in all parts of the body may exist. To do this, a knowledge of the human system is of first importance to be a successful Osteopath. Whatever pathological condition found anywhere in the system, our motto is, "take off the pressure," in order to a cure. Then we observe returning health in that body, no difference whatever peculiar name given to the affection. If there is heart trouble, no means relieves until the pressure is removed that produces it. Whether the intercostals are contracted, lessening the chest capacity, or whether the clavicle be drawn down so that pressure is made upon the neck veins, or pressure is made upon the nerves in the neck leading directly to, and controlling the heart's action, or interfering with the normal control; or whether there be congestion of the lungs, producing pressure upon the pericardium or the blood vessels—the thing to be done, to cure, is to take off the pressure.

If there is interference of functional action of a nerve anywhere, that condition is continued as long as there is undue pressure on that nerve. If the muscles contract down on any one or more of the recurrent nerves of the neck, function of that or those nerves is interfered with. If there is headache, due to the capillary congestion, cutting off the flow of blood through the capillaries—or in the tissue in the part—what other thing to be done than taking off the pressure and let the blood or fluids continue? If we have enlarged tonsils is it not on account of arrest of flow of the blood or other fluids in the tonsils? That being the case, what is the indication? Remove the obstruction. We have a wry neck—the sterno-cleido-mastoid has lost its balance—irritation of the nerve that controls its action exists—contraction ensues, the head is out of balance—the neck is drawn, mobility is difficult or arrested, every muscular fiber in that muscle is crying Take off the pressure. The mucous membrane is all red, congested, catarrh is present; pain in the frontal sinuses exists—a thin watery mucus is present—soon it thickens—chroni-



PLATE V.—Angle of Jaw Movement.

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coryza is the result. What is the matter now? What causes this affection? *Capillary congestion.* The veins of the neck are pressed upon. The jugulars are distended, the return current of blood is obstructed. What is to be done? Take off the pressure—keep it off, and your catarrh gets well. Contraction of the muscular fibers in a muscle tightens an aponeurosis, a tendon, a ligament—this is perhaps drawn across a nerve; it may draw a bone partially out of its relationship, distort a number of muscles, each in turn contracting its fibers, produce undue pressure on nerves, blood vessels, or lymphatics; pain ensues, fluids increase in the parts, pressure increases, pain intensifies—rheumatism ensues, mobility ceases or is lessened, and much disturbance of the whole system is noticeable—perhaps there is increase of temperature, amounting to a fever; the trouble goes on increasing, inflammation ensues, finally breaking down of the tissue begins—suppuration closes the climax! All this in consequence of abnormal pressure—which, if it had been taken off, the whole phenomena, as portrayed, would not have been. We go on down the neck; out of the sides of the cervical vertebrae to nerve bundles that terminate in various muscular fibers on the shoulder, and supply the arm and forearm, wrist and hand with nerves—these are pressed upon by muscular contraction—pain or paralysis ensues. What is the means of relief now but to take off the pressure? We proceed on down the spinal column: important and controlling influences are met with at every step of our advance, and we find that one of the ribs has become distorted, a vertebra is out of line, some muscle is contracted, pain exists in and around the heart, there is dyspepsia, the liver is torpid, cardialgia ensues—acidity of the stomach is perceived—it becomes a common thing to eructate acid. Now, what is the indication? Will medicine correct the difficulty? remove the cause? adjust the distortion? Is it reasonable to expect drugs to correct this difficulty? What is the indication? Answer—Take off the pressure. We pursue our examination along down the ver-

tebrae, and now we are between the scapulae. Here, between the fifth and the sixth vertebra we meet with a set of nerve filaments that seem to control (or supply influences that control) the digestive system; regulate the secretions of the liver, stomach, pancreas, and thereby promote order in digesting the food, and prepare it for absorption, and control the negative forces of the so-called *solar plexus*. Here we reach nerve filaments that, being stimulated by our manipulations, regulate digestion, relieve pain and cure stomach and liver troubles by restoring normal secretion in the organs themselves. Passing on down to the eleventh dorsal vertebra and including the twelfth, we encounter nerve filaments that go directly to the kidneys, control its secretive and eliminating powers, and restore normal action of these marvelous and truly important organs. Descending still further, we at once come to plexuses of nerve filaments that actually control generation, superintending the animal portion of the human body, and exercise influences that are the marvel of all ages and all thought! Through these nerves we connect the animal with the spiritual man-starting forces at or near the second and third lumbar vertebrae that superintend, in both sexes, the procreative organs, with all their marvelous consequences, making life pleasurable or miserable, according to the freedom or pressure along the lines of distribution. Our observations continue to become interesting the farther we go, for out of this lumbar region are nerves that go to and superintend the various organs in the pelvic cavity, as well as communicate through end fibers, with the brain itself, and receive in turn directions how to regulate the restorative and eliminative processes of the lower abdominal viscera, colon, rectum, genitalia, etc. Here we reach the fibers of nerves that pass on down the lower limbs, and that control muscular action, blood supply, nutrition, elimination and circulation of the fluids of these parts.

Thus we see that we reach the whole person through our manipulations, exercising an influence over every part. This

is done with a certainty that no other system of healing ever devised by mortals can boast of. When the reader comprehends the fact that *the nervous system controls the whole system*, a large amount of light opens up and shines forth as clear as the *sun at noon-day*. The manipulations that seem so simple at first sight, become matters of exceeding interest; his faith enlarges, his former prejudice softens down, melts away in the azure light of the first dawns of a great truth that almost produces blindness on account of its marvelous brightness. To be able to take hold of a person and so adjust the system to itself that diseases of all kinds are dispelled, is surely a consideration that becomes peculiarly, as well as intensely, interesting to contemplate. To do this without introducing drugs into the stomach adds importance to the process. Hundreds of cases pronounced incurable by a large number of as good physicians as medical schools produce, and as long practice and experiment have qualified, cured by this system of treatment, increase our interest in the science, so that it becomes a matter of no small consideration.

The results following the proper application of Osteopathy are constantly accumulating, and as the evidence increases, the faith of the afflicted enlarges and trials are made, so that proof becomes obtainable from various sources supremely favorable to its adoption. The demand for the practitioners of this science is more than the supply, and thousands of places are offering opportunities to show their appreciation of a system of healing their diseases without medication from drug-doctors. The great difficulty to overcome is the prejudice of the people whose education along the lines of medical practice has moulded their habits into a particular form, and investigation denied a hearing, and evidence rejected, so that it is impossible to convince such until force of circumstances compels them to do so. No new truth is at once popular, nor does it ever find a lodgment in the public mind at once.

Osteopathy was practiced many years before it was

known in the small section of the country where it
Any great truth is difficult to find adherents read
being sought for and demanded, will be hailed w
when once investigated. This is being done with
rapidity and avidity, as its effects are seen and ex

THE RESPIRATORY PROCESS—MECHANISM

There are two stages of this process. The one
inhalation, the other *exhalation*. The one is the re
air into the lungs, and the other is expelling it.
both performed by the action of the chest muscles.
the composition of air inhaled, and the changes re
the air while it is being drawn into the lungs an
through the air cells in the lungs, and to note its
condition as it passes out of the lungs, the reader i
to works on physiology, as a description of the phy
the human system is not the province of this volu
have to do with the mechanism of the process of re
The muscular system arranged around the chest is
adapted to this process, and by expansion and cc
of the muscular fibers of these muscles complete c
the quantity of atmosphere is had. The respirator
is performed very largely by the exercise of the will,
the quantity of air received in the lungs in the act c
tion. Many persons live on a limited amount of
others exercise almost, if not quite, the full capaciti
breathing apparatus.

That the proper use of all of the capacity of th
ing apparatus be made, the very nature of the str
the human body would at once admit, but there are
who do not recognize the importance of breathing, t
do use all of the lungs, it is strange that more peopl
sick than there are. Every drop of the blood that
through the human body, to be healthy, must have
and no other way being provided for oxygenation



PLATE VI.*a.*—Treatment of the Ears.

through the skin) of this fluid except as it passes through the capillaries in the lungs, it becomes a matter of vital interest to afford opportunity to use all of the capacity provided for breathing or inhaling the purifying material, oxygen. The proper appreciation of this process of nature's method of "purifying the blood" would do away with the idea of medicine "*purifying blood*" (a thing it has no adaptation to do, and never did nor can do), and a universal use of the proper means provided to purify the blood would not only prevent, but cure, many diseases that already exist. Breathing is a *necessity* to life in the body, hence *important*. The part that oxygen plays in the body should not be lost sight of. If there is nothing the matter with the lungs, and a proper condition of the muscular system that controls the action of the chest exists, there can be no reason why all of the lungs should not be used. The necessity of it becomes apparent when it is understood that this is the means provided to oxygenate the blood. How this purification is brought about, we understand, is by an exchange of gases as the blood passes through the capillaries of the lungs on the sides, through the connective tissue (in the capillaries of the lungs). The oxygen is admitted and the carbonic-oxide is exhaled. It may be readily seen that, in case a part of the lungs is not filled with air, there can not take place that exchange of gases, and in consequence, the blood that should be purified by oxygenation fails to receive any oxygen, and passes back through the pulmonary veins as impure blood, and the arterial blood that nature designed to be pure—fitted especially to renew the waste that is constantly going on in all parts of the body, and needs new, pure material to supply—has to put up with this half-purified substance, and the result is seen in poor health. What else could be reasonably expected? The importance of breathing should never be lost sight of. The essentiality of pure blood should receive greater consideration than many are wont to give it, if continued good health or a return to health be a desideratum. From this storehouse of purified

blood every part of this complicated house we live in is rebuilt. Every tissue is made up from the substances drawn from the blood, and if the material from which the tissue is made be deficient, the tissue itself must necessarily be. That state of the blood called *pure* we understand to be a state brought about by a giving out of the *carbonic-oxide*, and the reception of oxygen. It will be remembered that as the blood passes through the capillaries at the ends of the arterioles, certain elements are given up; these elements supply the parts, and the residue passes on into the venules, and the waste material in the locality of the capillaries is converted into fluid or gas, and passes into the lymphatics and thence into the small tubes called venules, to mix with the unused elements of the arterial blood, and this mixture is carried back to the heart, the right side, thence thrown on into the lungs. The poisonous elements are here rearranged, rejuvenated, and all this takes place as the blood passes through the lung capillaries. In the one instance (at the ends of the arterioles) there is a giving-out process of elements, and at the other end (in the lung capillaries) there is a receiving, as well as a giving-up, process. Now this blood that is made over in the lungs, remember, is our precious material, by which we are to be renewed and kept healthy, to be drawn from. Nature has made this especial provision, and she accepts no other means. She makes and keeps pure all her supplies at all times, watching over every part of every element and tissue in our body by a great system of nerves called the sympathetic, that never slumber nor sleep while we live. To interfere with her marvelous processes always results in confusion in every department of the wonderful structure called the human body.

Starting back from the lungs, this blood should contain every element necessary to the uses intended, and if it has these elements, perfect harmony is maintained, and no unnatural changes occur in any portion of the body, but perfection characterizes the whole process of tissue building, removal



PLATE VI. *b.*—Ear Extension Backward.

of waste material; harmony reigns, and the body experiences neither pain nor disturbance. But let there be interference anywhere in the harmony of this perfect process, changes occur, disturbance disarranges the molecular relationships of the normal elements, confusion starts, and the order being changed, the whole system feels the shock and the sympathy begins—disease is what we term the result. To cure this disease we must restore the harmony.

We should begin at the starting place to restore harmony, and we conclude that the beginning place is in the blood-manufacturing and purification department—the one to first consider. It is said that “the life is in the blood,” and if so, that fluid must contain the elements of life. These, we have been informed by physiologists, contain sixteen elements. During the process of gestation the foetus derives all these elements from the blood of its mother through the foetal circulatory process. We start with a human being already made, possessing life with all of its elements.

To maintain the normal arrangement it is a demonstrated proposition, that, as soon as the new relationship begins, air is the first essential to start the respiratory process. This must be maintained during the life of the being. The air contains properties that start expansion. It possesses substance or substances that fill spaces in the structure of the body called lung tissue, arranged in the form of six-sided cells, at the ends of tubes, through which air is admitted and fills these cavities, which, it is said, number many millions; and these cells are so constructed that air passes directly through their walls into the fluid that circulates between them in their walls, and the changes from one state to another ensue at once—in the capillaries. Whether this is done in the lungs or in the skin of the body, it is essential to the purification of the blood, and the renovation of it so that the tissue elements shall be in it when it starts on its mission of distribution from the lungs through the heart (its left side), thence through the arteries into the various parts of the body.

This newly-formed blood furnishes material that supplies the glandular system, and as it circulates therein the sympathetic nervous system directing the action of the secretory apparatus of the gland in such a way as to manufacture just such material as is needed in the particular locality of the gland, and for the uses to which it is appropriate. In the salivary glands a secretion is directed to the mucous membrane of the fauces, for the moistening of the food during mastication. This is the first step in the process of use of secretion in the digestive system, and this secretion, be it remembered, is drawn from the blood. The next step in the preparation of the food for digestion takes place in the stomach, and there another sort of secretions is manufactured, and one of these furnishes the cardiac end with the material for the mixture of the food in that part, called peptic (manufactured by the peptic glands), and the other set, called the pyloric glands, add their secretion as the food advances toward the duodenum, where a continuation of these pyloric glands seem to merge into what is termed Bruner's glands. These secretions, it will be understood, all come from the blood, and are secreted by and through the direct supervision of the sympathetic nervous system. The next step in the process of digestion takes place as the emulsified material passes out of the pyloric end of the stomach into the duodenum, through which passage the pancreatic and hepatic secretions become mixed. We are now ready to watch the process of absorption. The food, up to this point, has been prepared by the admixture of the various secretions for this last step in the process of entering into blood. No elimination has occurred. The products are held in solution—all that will be acted upon by the secretions—and the product is now in a condition to enter the abdominal lymphatic system through the walls of the small intestines, and thence carried through receptacles to the thoracic duct into the general circulation—first being mixed in the current in the subclavian vein on the left side of the upper portion of the chest—thence on into the right side of the

heart—through the right auricle, and thence through the right ventricle into the pulmonary artery, through which into the lungs. We are now back to the starting-point. All of this process has gone on through influences started in the respiratory act by which life is constantly imparted to the blood through *oxygenation* in the *lungs*.

This dissertation explains the whole process of circulation of blood and digestion, starting with the first forces brought into requisition from without—*oxygen*.

THE POSITIVE AND THE NEGATIVE FORCES IN THE HUMAN BODY.

It is evident that two forces exist in the body, or that through the action of the nervous system we have two separate and distinct influences exercised. The one conveys influences to or toward the center, called *afferent*, and the other carrying influences outward, called *effeient* nerves. These terms are alike applicable to *blood* vessels. The two sets of nerves are called *vaso-dilators* and *vaso-constrictors*, originating in the *bulb* of the medulla oblongata. *An irritation or stimulation of the vaso-motor center in the medulla, either directly, indirectly or reflexly*, causes an increase of the blood pressure. This may be done also by stimulating the spinal cord, and by stimulating the vascular area directly by means of altered blood. A decrease of blood pressure may be produced by stimulation of the vaso-motor center in the medulla, either directly, indirectly or reflexly—directly by oxygenation; indirectly by impressions descending from the cerebrum (*e. g.*, as in blushing), and reflexly by stimulation of the *depressor* nerve, and consequently dilatation of vessels in the splanchnic area, and producing inhibition of the center by stimulation of other sensory nerves; by stimulation of the spinal cord, possibly directly, indirectly and reflexly; by stimulation of each vascular area directly (*e. g.*, by means of altered blood, or heat). Any increase of press-

ure from whatever cause, whether from direct changes in the blood itself or decrease of central power, has its influence directly or reflexly on the circulation.

Independent of these two influences obtained through the nervous system, we have a *positive* and a *negative* force brought to bear, and which produce a change in the character of the secretions according to the positive or negative influence brought to bear by the special manipulations or degree of pressure on a part of the body.

THE SCIENCE AS IT IS AT THE PRESENT DATE.

There have been no new nerve centers discovered, no new tissue has been formed, and only a different way of affecting the system through nerve filaments. We would not detract one laurel from the brow of the assumed founder of this method of healing. We can not concede to him all that he claims, nor that every time a pathological condition is found, "that it is the result of partial or complete dislocation of a bone." Neither do we indorse the "make-believe" style of "setting a bone" every time some sudden "creak" is heard in manipulations. That there are new ways of adjusting luxations would be naturally expected; but not anything new has been discovered by Dr. Still, except that the system, through peculiar though natural manipulations, over nerve centers and through terminal nerve filaments, should so exercise or produce an influence that would cure disease, or so change the constituents of the blood by increased circulation, and through the increased and uninterrupted flow of the fluids reduce the system to a normal state. This we readily admit he has the right to claim. This is a grand one, and this is what we are endeavoring to demonstrate to the readers of this volume.

The science is as easily learned as any other method of treatment, and the marvel of the method will somewhat modify in the minds of the people when properly explained as



PLATE VII.—Vibration of Temples and Forehead.

found herein. That disease should be caused by interrupted circulation has been a known fact for long years—in fact, since Harvey discovered that the blood circulated. The methods of treatment, although differing from each other in method, have had an eye to the “purification of the blood,” but none seemed to place importance on the manipulatory process (outside of massage, and that ignorantly performed) as a means of scientific restoration to health. Dr. Still lays claim to this discovery, and since a system has evolved from this thought, and formulated manipulations have been adopted, and some localities have been found to be more vulnerable than others, and each has its particular reflex influence on others, centers, etc., the study has been, of late, to systematize the manipulations and the manner of giving them or performing them, that certain physiological results will follow. This has been largely accomplished, and we are largely the “commanders of the situation” as far as disease is concerned. That there are occasionally a bone or bones luxated is readily conceded and adjusted, and results caused thereby changed when adjusted is admitted, but the principles of this science are couched in the “freedom of the circulation of the blood and other fluids of the body.” This accomplished constitutes the sum total of Osteopathy. The blood carries in it the life and the elements which make up the new material; and when permitted to circulate undisturbed a normal state exists, and the nervous system being intact (that is, free from pressure everywhere), the normal functions are performed throughout all parts of the body, and health is the result. To know how to properly adjust the system to itself is to know how to cure disease of all kinds.

THE CONTROLLING INFLUENCES OF CERTAIN LOCALITIES.

That there are certain topographical centers in and on the body that, stimulated, seem to result in wonderful changes, the Osteopath abundantly demonstrates, goes to

prove the possibility of successfully treating diseases without drugs. We admit a few instances. There are certain localities that we term vulnerable points. Take, for instance, the cervical ganglia—the upper portion of the neck: here, when we stimulate the terminal filaments of the vaso-motor nervous system, there results all over the body a slowing up of the arterial circulation of the blood. Here, between the third and fourth cervical vertebrae, we reach filaments that send an influence to the diaphragm, greatly influencing respiration. And we have stimulate recurrent nerves that control the secretion of important glands, that influence muscular and connective tissue in the cervical regions that, left alone, results in the various affections of the throat; and down a little further the spinal accessory is reached, through which the action of the trapezius and the sterno-mastoidei muscles are supplied. From the first to the fourth dorsal we reach important filaments that have much to do in the respiration, inhalation and expiration processes, the treatment of asthma, etc., and are not a small factor in treating lung troubles. At the fourth dorsal it is said that there are nerve filaments that begin the great splanchnic nervous system, which has so much to do in regulating stomach troubles, and through these nerves we reach the stomach, the liver, and in fact all of the vessels that have to do with the negative forces in the abdominal viscera—hence important to know them. The lesser splanchnic seems to be greatly concerned in the treatment of that condition we denominate chills, for it is here at the eighth dorsal that our principal treatment is directed for intermittents. Then, in the lumbar region, at the second vertebra, we regulate the action of the genital organs, starting forces that have lain, perhaps, dormant for months, and that have yielded to no other means or treatment—correcting same in a few hours. Through the lower lumbar and the sacral regions we produce influences that control the pelvis and lower limbs, regulating actions therein that result in relieving the pathological conditions that other systems fail to



PLATE VIII.—Stimulation of Supraorbital Nerves.

affect favorably. Thus we reach the various centers through certain topographic localities not thought of or known of by the general practitioner. The strangest and most unaccountable results imaginable follow these treatments, especially to those who have looked for cures through a regular course of medication! To think of curing flux, diarrhea, chills, asthma, and every other curable disease by the manipulation of the body, stimulating certain localities, strikes the new beholder with such astonishment that it seems incredible! A fair trial is all that is necessary to convince the most skeptical of its verity, and even more *marvelous* results. We intensify this with extreme emphasis. *It is the greatest boon that ever has been offered to the human race for relief and cure of physical ills—acute or chronic—and all people must know of it!*

MISPLACED APPLICATION OF OSTEOPATHY.

The tendency of the *tyro* in Osteopathy is to extol it beyond measure, and endeavor to distort it out of all proportion, and assign it offices not at all adaptable to its particular sphere. The limited judgment seems obscured by the mental obtuseness of the limited intelligence of the would-be scientific dispenser of the science, in his fruitless efforts to apply it to pathological conditions that nothing but the resurrection is applicable to. The *enthusiast* who overestimates his calling and presumes to imagine that his horizon is all there is, soon becomes burdened with its limited environments, and knowing only *his* landmarks, fails to see the unlimited resources of the great world around his little sphere, and is sooner or later engulfed in fathomless depths, and lost in the great labyrinthian regions that revolve around him. If we could be convinced that *we* are the *great cosmos*, the culmination of intelligence emanating from a *divine mind*, and that *mind* permeates and controls every atom in every tissue in the body, our thoughts would be occupied in learning how

to harmonize the various elements so that a continuance of this harmony might be kept up.

That there is a way to approach the citadel of thought enwrapped in flesh and integument, experience demonstrates to be true; for the avenues are so numerous that it would require almost eight years to count them, one by one, eight hours a day and fifty a minute! Every one of these avenues have numerous terminal filaments of nerves permeating all sides of them, and each impression made on any part of these tubes, these nerve filaments convey it to the brain, formulate it into an idea, and that is directed to the citadel of thought, takes form, and brought into use as occasion demands, carrying into execution as needed afterwards, to continue the harmony of every other part of the body. These thoughts thus formed, constitute the world of thought that is conveyed through these small tubes, called nerves, that control, direct and care for every atom that moves in the channels of this *marvelous cosmos*—the human body. To keep up the harmony throughout, and all the time, constitutes the philosophy and the intelligence couched in the science called Osteopathy. Wonderful discovery! This whole frame of ours in every part is made up of marvelously constructed tubes. Every tube, including the nerves, is controlled by the sympathetic nervous system, and execution of the will, whether we are cognizant of it or not, is performed by the motor system of nerves—these being the executors of will-power conveyed through the sympathetic nerves. Sensitive nerves are also servants of the sympathetic, pealing forth their howlings and complaints whenever impinged upon too strongly. Everything acting in perfect harmony throughout this organism of ours, life flows on like a peaceful river; but when encroachments crowd, when interference of this harmony is made, confusion begins; the rallying of the forces takes place; increased effort ensues, too much pressure changes the forces, change of tactics occurs, chemical action



ensues, and new relationships cause the whole system to sympathize, disease results—Pathology.

AN INTELLIGENT APPRECIATION OF THE SCIENCE.

That there are certain "buttons" to touch to produce results called cures, many are disposed to believe; but that this is fallacious, and only intended to cover up ignorance, will be apparent to any intelligent physiologist. That certain localities are what we call vulnerable points, is conceded, but that these control the whole organism, we are not ready to believe. That contraction of muscular fiber pressing upon nerves or blood vessels influences their functions, we know to be the fact, and that nerve action takes place at their *ends* we also concede, but that touching certain nerve centers, as is claimed (a thing that is not done), produces results at their ends, when a sufficient pressure along the lines of these nerves is made to cut off communication, we most emphatically repudiate as a notorious misrepresentation of the real facts. Pressure along the course of nerves controlling certain tissue, sufficiently hard to interfere with the function of that nerve, produces disturbance of circulation of the fluids at the said terminal; separation of motor and sympathetic footlets ensues, and as a consequence, an increase of fluids takes place, pressure is thereby increased, and surrounding tissues are involved, a further increase of the disturbance goes on, and thus disorganization, decomposition, chemical changes occur; inflammation results.

To endeavor to describe to the intelligent Osteopath any particular movement to be made in all cases, would be like the routine prescription of the country practitioner, or the old Thomsonian physician who, when he had given his six remedies, and patient not cured or dead, would *repeat* the same. The science of this system dwells in the realm of reason, and while the former patient might have been relieved by this or the other particular move, it does not follow that

the same one should be practiced on each and every other. The movements, to the looker-on, seem exactly the same, but there is a difference, according to the necessity of the case, coupled with the intelligence of the operator. If there be diphtheria in one case and erysipelas in another, the neck muscles are manipulated seemingly alike—and necessity in a given case may demand it, but not necessarily. The same muscles may not be involved, and yet may be; but there may be complications in the one not in the other, so that in all cases it should be understood that each particular affection requires particular stress paid to it. The forces brought into action by the various manipulations bring about wonderful changes, depending largely upon the nerves involved, and how applied.

The specific results contemplated in all manipulations should be to take off the pressure, so that a free flow of the fluids through normal channels is effected—then restoration to a normal condition universally results; normal chemical changes go on, waste material is dissolved, eliminated, new tissue replaces the old, nerve forces established, and in the large majority of instances, health is restored, or started to be restored—thus, if pressure is kept off, pathological conditions cease. *This* state of affairs may have resisted all other known agencies, yet this always succeeds.

ADAPTABILITY A PREREQUISITE TO SUCCESS.

Many who study the philosophy of this science may understand it, how it ought to be applied, and yet be wholly unfit to practice it upon any one on account of mechanical inefficiency, awkwardness, clumsiness. Such individuals make failures, where one less intelligent as to the understanding of the science or the anatomy of the human system, its physiology or pathological conditions, excels. Such individuals need a manipulator. Too much stress can not be placed upon adaptability, and then a thorough course in the



PLATE IX.*a*.—Vibration of Sides of Nares.



training department of that branch of education called movements—manipulations—and the *how* to apply them. Hence *applied Osteopathy* means a great deal. The failures are on account of deficiency here, in the large majority of instances, and yet I would not undervalue a thorough knowledge of the human system in health as well as disease.

There are certain insignificant pretenders who would make-believe that certain fumbling movements, twisting the body with finger ends, have special effects, marvelous in consequences; they are too insignificantly contemptible to deserve only the mentioning to expose their ridiculousness. Osteopathy, understood, is a great big, reasonable, sensible, large, ideal method of relieving suffering humanity, and not a lilliputian, spiritualistic, massage, mental science or *Christian Science* imagination. It is *strictly demonstrable*, comprehensible, *rational*; standing out in bold relief, unquestionably effectual, satisfactory wherever known and properly applied. Because ignorant pretenders use it, practice it, should be no argument against its value, significance and worth, for what science has not been abused by mere pretenders and unqualified shysters? Who, in the learned medical ranks, has not witnessed such in every age? We insist that intelligence and adaptability are prerequisites to a proper application of this science, and added to these the *mechanical* skill of the manipulator, you have the results desired. We would further emphasize the fact that physical strength is not altogether a prerequisite to the application of the science of Osteopathy, for there are many now successfully practicing this science who are not strong physically. It is remarkable how the strength of the operator increases as practice in the manipulations is repeated. The strength seems to increase with the practice, not only in the doctor, but in the manipulated. This science benefits every one to whom it is applied. What other system of healing can this be truly said of? (outside of financial considerations, and then only one side gets the benefit—and often neither one.) The community may get rid of the

subject, which sometimes is a source of great benefit. This is applicable to medical action usually. Unbridled ignorance is capable of doing much harm along lines where life is involved, hence it is better to use a science that is harmless, and only good comes of it.

THE PEOPLE DEMAND AN INTELLIGENT REASON FOR A THING.

The confusion existing in the minds of pathologists, as well as physiologists, about the blood, its circulation, how it is formed, what it is when formed, shape and size of corpuscles (if there are any), seems to be as far from settlement as the poles, and what is asserted and written about this fluid goes to prove that it is not understood.

The nervous systems are alike little understood, hence much of the pathology is only hypothesis, not understood, and the whole remedial system from the first deviation from a normal, through all the various stages of pathological changes that end *in articulo mortis, veritas*. Along a course of forty years of close and persistent observation, it has been my lot to learn that, strictly speaking, medical knowledge is largely surface, and that largely imaginary. The secret source of life has not been discovered, and the search has been an ineffectual one, resulting in utter disappointment by the most ardent thinkers along down the ages. All for the reason that search has been made in the wrong direction—not where it is, but on barren deserts, lonely valleys, blood-curdling rocky heights, in dark caves, offensive cess-pools; and in the mad chase found nothing but a bacteria, an innocent bug, as a cause of disease, and utterly failed to find the source of life, or the means to sustain it. A signal and utter failure! These searchers have sought in vain, because they sought in the wrong places—the *causa morbi* being in the body itself—pressure, impediment in circulation, caused by undue pressure. This question solved, and the means of



PLATE IX.*b.*—Stimulation of Lacus Lachrymales.

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removing it, lets in a flood of light that has never dawned upon the medical profession up to this blessed hour. It will be a revelation to those who open their eyes to the facts and see. That a systematic course of manipulations by an individual competent to make them, properly apply them to a person diseased, so changes the whole person that disease or pain subsides, is the hardest thing for some people to believe of anything imaginable. Manipulations have usually been relegated to the massagist as a sort of rubbing process, serving as an *adjuvant* in the cure of diseases—a sort of accompaniment of medication, to increase its action somehow or other, and to either amuse or in some manner aid in ameliorating the condition, neither understood by the doctor nor the manipulator, but applied as a sort of excuse for *doing something* to satisfy the patient. The facts are, much has been done that way to suffering humanity, and all of the various so-called means and remedies used to cure the sick have been suppositions, rather than intelligent knowledge of either the thing used or the cause to be removed. Jargon, confusion, ignorance, presumption, and experimentation have characterized the most of the means used in the treatment of the sick. To present to the reader and the profession something tangible, reasonable, something that may be relied upon, is the object of this treatise. To understand this philosophy and the proper manipulations, panoplies the possessor with the most certain means ever presented to the world.

THE FORMATION OF MATERIAL FROM THE FOOD INTO
BLOOD.

There are physiological deductions as regards the formation of the various tissues, the office of the glandular systems, and how the various parts of the body are formed. There are certain functions that each and every gland performs, and from observation we perceive that it is the province of each and every gland to generate a specific secretion, and that this

secretion has a special mission to perform in the human economy. That there is a specially arranged structure that each has, and that in the meshes of these special structures lies the official power, seems rather far-fetched, in consideration of the functions of the sympathetic nervous system. As each stage in the process of formation, elimination, etc., proceeds, from the first introduction of food into the mouth to the final metabolism of that product, we find special functions performed in the various departments exactly suited to each in the physical economy. Notice now, if you please, how we account for the whole procedure, and we opine that much light regarding the nervous system will have been thrown into the workings of each department of the house we live in. Our theory is, that through the special direction of the sympathetic nervous system, executed by the motor nervous system, each particular element is separated or drawn from the blood, in the various tubes through which the fluids pass, and that because of its knowledge of how much of this, and how much of that element is needed in each particular locality, the same is ordered to be drawn from the body of the blood, and either deposited there, or converted into other or new compounds by chemical affinity; and if the renewal is to be made, the elements are placed wherever needed; and if waste material is to be carried out, it is done; if special compounds are to be used in a particular gland, it is made there as needed, by the chemical, physiological law inherent in the physical organism. That when no obstruction is interfering with the normal circulation of the fluids, and there is no unnatural pressure on the nervous system each and every part of the physical organism undergoes the normal processes of tissue change and elimination. The nervous system selects from, or manufactures in the salivary glands the kind of secretion during the process of mastication that is essential to the preparation of the food for the next step in the process of digestion; and when the bolus is called the stomach, another



PLATE X.—Vibration of Facial Muscles.



covers it and mixes with it, and certain changes take place; and then another step is taken, and we find that additional glands are brought into requisition to manufacture certain secretions different from the preceding, and mixed with the former secretions, with and in the food, and that, in consequence, another constituent is formed—an ingredient that prepares the contents of the third department—mixture and compound—to be taken up by a set of tubes called lacteals (succors, absorbents), and conveys the fluid part of this compound into larger tubes, called receptacles, and then it is conveyed through a duct, called the thoracic, into the subclavian vein; thence it goes to the heart; from thence it is conveyed into the lungs. Up to this point we have had accession after accession all along the line, from the time the food was introduced into the mouth until it lands in the heart—not only the new material, with the various kinds of secretions, but the waste material from every tissue in the body. The interesting part of this work is before us, and we now proceed to follow this fluid on its rounds through its meandering course, watching each particular element as it is directed and controlled by the nervous system until we shall have seen it again in the capillaries of the lungs, where we left it. It will be remembered that the sympathetic nervous system is the chief factor in this locality (the vagus supplying the lungs), and here is the workshop, where the beginning of all the tissues in the body are manufactured, a reinforcement and a renewal of the *elements* begin, and it is here that the sifting-out process takes place—the exchanges occur—oxygenation begins—the incineration of waste material and the elimination of carbonic oxide take place. It will be remembered that there are over seventy-six millions of small cubic cavities in the lungs, and that they are separated from each other (and yet all connected with each other) by a thin membrane; or, rather, two membranes, and that between each *air cell* there are small tubes through which the blood passes—not in the cell, but on and in the membranes of the sides; and these are denomi-

nated the *air cells*. Into these cells the air rushes at every inhalation, and by a process called *endosmose* oxygen is forced through the walls of these cells, on all sides, into the blood, as it circulates around these cells, oxygenates the blood, and at each exhalation the carbonic oxide is thrown off, the venous blood converted into *arterial* blood, and then, through the vessels called pulmonary veins, carried back to the heart, where it enters the left auricle of the heart as *pure blood*, ready to start on its mission to renew the waste material of the general system. From the left ventricle the blood enters the aorta, from which arterial trunks receive the blood, carrying it to every portion of the body. As the blood is ushered on through these tubes out into the various trunks leading to every part of the body, a change in the size of these tubes is perceptibly observable—the tubes become smaller and smaller until they become microscopic in size, when they lose their outside coating in the tissue, and become capillaries. Here is where the interesting part of our science concentrates, and the effects of our system are so brilliantly manifested. As the warm, pure, vitalized blood passes into these small tubes, whose caliber is said to be about one-thirty-two hundredth of an inch in diameter—the connecting link between the ends of the arterioles and the beginnings of the veins—there is given off through the walls of these capillaries from the blood, as it passes through them, the various elements needed to supply the waste in that immediate vicinity, and the remnant passes on through the capillaries into the venoles as refuse, or degenerated blood.

We are loathe to believe that the *blood corpuscles* pass out through the walls of the capillaries en masse, as some physiologists affirm, for this would render confusion in the parts, and produce chemical changes that would necessarily be destructive to the tissue into which the said corpuscle entered; for please to bear in mind the fact that this corpuscle contains *all* of the elements necessary (if normal) for building up every tissue in the body, and it is evident that there is not,

in the locality of these capillaries, a complete metamorphosis having occurred, consequently there is no necessity of all of the elements in the corpuscle being deposited there, simply to engender in the part excessive chemical changes to prepare these various elements for elimination.

Now, if the reader will patiently follow us through this seemingly labyrinthian maze that has so beclouded and bewildered the physiologist, we shall try to make the matter understood—how the body is renewed day by day, and the waste material is disposed of. The process is interesting, in that it involves the whole matter of *life* and *death*.

It will be remembered that the circulation of the blood in the *arteries* is dependent upon the *nervous system*. This system is supposed to be the *vaso-motor*, that controls the peristalsis, by its influence in the muscular walls of the blood vessels—from the large orifices of the heart to the ultimate ramifications of the smaller twigs of the arterioles. Now, as each blood corpuscle enters the capillary, containing as it does the elements of nutrition, the sympathetic nerve filaments ending in the capillary direct the kind of element needed in that particular locality, and the quantity to be drawn therefrom, and this is done, and here, by the universal law of chemical affinity. This, or these elements, unite with other elements already there, outside of the capillary, and through contact change the structure as demanded—right there, passing the gas or fluids that are produced by the change on into the lymphatics, through which the excess or waste passes, entering into the veins, beyond the capillaries, with the refuse, the unused elements, whence it is conveyed back through the veins to the heart, and thence to the lungs, to again be renewed for its next round through these, or other parts of the body. And now, as some of this blood passes into and through certain other renovating apartments—such, for instance, as the kidneys, the skin—a process of elimination takes place. All of these changes take place by a direct communication of *mind* through the sympathetic nerves, to

the motor-end filaments, which execute orders, and the work is done. This, in brief, is the process that is constantly going on in the system, and it is the universal order of every department in the body. The necessity, therefore, of seeing to it that every channel, tube and nerve filament be kept free is apparent to the practitioner, if perfect harmony exists; and if it does not, it is his duty to be wise enough and know enough about the workings of these various departments to see to it that they are set to rights by the proper manipulations that take off the pressure.

THE ELEMENTARY CONSTITUENTS OF THE HUMAN BODY.

In nature we have for the cardinal elements, *Carbon, Hydrogen, Oxygen* and *Nitrogen*. Some one or more of these enter into combination with the food eaten to make up the physical structure we call bone, muscle, cartilage, tendon, etc., and these are so arranged that perfect harmony in a normal condition exists.

In addition to these four cardinal elements we have Sulphur, Phosphorus, Chlorine, Calcium, Sodium, Potassium, Magnesium, Iron, Silicon, Lithium, Manganese, Fluorine. It is said by physiologists that oxygen enters into the fluids of the body in a comparatively free state, either in solution or loosely combined. Nitrogen is found dissolved in the fluids, and hydrogen occurs as a product of decomposition in the alimentary canal.

These sixteen elements are combined in various proportions in the body, and make up the tissues thereof. The simpler bodies are crystalline, as chloride of sodium and urea; the more complex, as albumen, are amorphous. Chloride of soda and urea pass out of the body, after crystallization, through the excretory organs, the albuminoids being better suited to form the solids. They are divided into the following classes: I. Inorganic Compounds; II. Organic Crystalline Salts, or the Urea Group; III. Carbo-Hydrates, or



PLATE XI.—The Divulsion of the Nares.



Sugars; IV. Hydro-Carbons, or Fats and their allies; V. Albuminous, or Proteid Compounds; VI. Albuminoid, or Gelatinous Compounds.

The Inorganic Compounds include water, acids, bases and salts. Water forms about seventy per cent. of the whole body, and is a general solvent, by means of which various materials may be taken into the body as food, or excreted from the body.

Acids consist of—Hydrochloric, which exists free in the gastric juice, and in combination with bases in all the tissues and fluids of the body; Carbonic, with bases in blood, teeth and bones; Phosphoric, in combination with bases, in the bones, teeth, corpuscles, brain, etc.; Sulphuric, with bases in blood, serum and secretions; Hydrofluoric, with bases in bones and teeth; Silicic, with bases in hair and epidermis.

Bases—Sodium, in all tissues and fluids; Potassium, in the muscles, red blood corpuscles, nervous tissues, secretions; Ammonium, sparsely in the gastric juice, urine and saliva; Calcium, in bones and teeth and fluids; Magnesium accompanies lime.

The Organic Crystalline bodies are very numerous, and are found for the most part as the result of the disintegration of albuminous material, and nearly all contain nitrogen. The principal members of this group are urea, uric acid, xanthin, hypoxanthin, hippuric acid, kreatin, kreatinin, lactic acid, lecithin, neurin, cerebrin, leucin, tyrosin and cholesterin.

THE NECESSITY—THE ABSOLUTE ESSENTIALITY OF TISSUE
ELEMENTS IN THE BLOOD.

They bear the same relationship to the body as food does. Many an Osteopath has been stranded in his efforts to "set a bone" that was never out, or to adjust a muscle that occupied its proper relationship to the system, and signally failed to relieve some chronic ailment that depended upon a lack of

one or more of these elements that go to make up the material of the house we live in. There are others who fail because of inattention to the habits, environments, etc., of the patient, manner of eating, time of eating, process of mastication, proper mixing of the salivary secretions, condition of the stomach as regards rest, or ability to perform its normal functions, so as to properly prepare the food for intended use. It is a singular fact that healthy blood must have all of the elements in it. The secretions in the mouth coming from the parotid, submaxillary and sublingual glands are necessary to dissolve the food and prepare it for the next step in digestion, as the food itself is to build up the waste that is constantly going on in the body. Here we have the first manifestation of the controlling influences of the sympathetic nervous system—the power to draw from the blood the alkaline secretions that dissolve food. As we descend into the stomach through the cesophagus we see another marvelous change in the character of the secretions—the gastric juices, composed for the most part of hydrochloric acid. The combination of the alkaline secretion from the mouth being mixed here in the stomach, emulsification ensues and the contents of the stomach being thus prepared, passes on into another division of the digestive tract, and there meets with another kind of secretion that is largely alkaline, from the liver and pancreas, and here the change prepares the food for absorption—that is, to be ushered on into other apartments, into channels that lead to receptacles that connect with a duct called thoracic, that carries the chyle up into and through the thorax, on the left side, and empties this compound drawn from the food into the left subclavian vein, through which it enters the heart (the right side of it), from whence it is conveyed to the lungs, in which it is brought in contact with the oxygen—one of the sixteen elements before mentioned, and the only element in nature that purifies blood! This process puts to silence the "Blood Purifiers" so earnestly recommended to be used by medicine vendors. The human system, remember, is a



PLATE XII.—Manipulation of Muscles of the Neck.



cosmos of itself, and in the normal state has its exact quantity of elements (in sufficient quantities and exact proportions) to constitute a healthy organization, and when the proper food is introduced at proper times, with the proper environments, it needs no help to perform its normal functions and keep itself in a healthy condition. We maintain, and shall endeavor to show, that disease is an unnatural and acquired state, and that it is due, primarily, to a change in one or more of the molecules of these elements, or a deficiency or change in them. Whether this change is brought about by lack of the proper food or obstruction to the normal circulation, these must be corrected, or disease will follow.

HEAT AND COLD.

The influence of these two opposite phenomena must not be lost sight of in the curriculum of causes of pathological conditions. It is the property of cold to contract and heat to expand muscular textures. These diametrically opposite states are prime factors in the production of many diseases. They influence the character of the changes that take place in the system, of these elements, as well as circulation of the fluids that contain them in solution, and the tissue changes of the organic substances of the various parts of the body.

Pressure sufficient to produce sluggishness in the flow of the blood and other fluids influences change in the nerve cells, or the magnesium, potassium, calcium, sodium and the iron phosphates as well as the potassium chlorides, and results in disturbance of the functions of said nerves. As the nervous system, especially the sympathetic, controls the action of the motor nervous system, regulating the caliber of the arterial system, we can readily see that disturbance must necessarily follow; as it is through healthful conditions of the nervous system all the functions of the body are performed. The various structures being composed of these elements in varying proportions, each exercising special functions in the

Lactic acid results from the fermentation of milk-sugar, and finally breaks down into carbonic acid and water. Sulphuric and phosphoric acids unite with the bases of the carbonates, forming sulphates, and set free carbonic acid. By means of the presence of sodium phosphate in the system, lactic acid is decomposed into carbonic acid and water. This element has the power or property of holding carbonic acid in combination, fixing it, and does this in the proportion of two parts of carbonic acid to one of phosphoric acid which it contains. This combination is carried to the lungs, and there, by the action of oxygen from the inhaled air, the carbonic acid is set free from its loose union with sodium phosphate, and exchanged for oxygen in the process of exhalation. Uric acid is kept in the blood in solution, by the presence of sodium phosphate, and is eliminated as such by the kidneys. When this acid loses its solubility from lack of sodium phosphate, it combines with the basis of sodium carbonate, and forms urate of sodium, which is insoluble. When this is deposited around joints it gives rise to gout and acute articular rheumatism. Sodium phosphate serves to saponify fats, or probably emulsify them. This salt can also take up albumen, besides the above-named acid. Albumen is said to behave itself like an acid. By reason of the property of taking up albumen the sodium phosphate can carry on resorption of pathogenic deposits of albuminous substances, hence so useful in scrofulous swellings, glandular enlargements, lupus and incipient tuberculosis, etc.

A disturbance of the molecules of sodium sulphate in the inter-cellular fluids may be followed, according to its duration or extent, as well as its location, by a retarded removal of the water of oxidation and dissolved or suspended matters. This implies a consequent liability to bilious vomitings, erysipelas, diabetes, etc.

It is interesting to know that sodium sulphate and sodium chloride act in opposite ways. While the former (the sulphate) removes from the tissues the water, according to

the process just described, the muriate (the common salt) enters the tissues, dissolved in the water from the blood plasma, in order that the requisite degree of moisture proper for each tissue may be maintained. The final products of the organic substances are urea, carbonic acid and water, through the process of oxidation. These, with the salts set free, leave the tissues, and thereby give place to less fully oxidized organic bodies, which in turn finally undergo the same metamorphosis. The products of this retrograde tissue change are conveyed through the lymphatics, the connective tissue and veins to the gall bladder, lungs, kidneys, bladder, and skin, and are thereby removed from the organism with the excretions, such as the urine, perspiration, feces, etc.

The above detailing of the action and uses of these tissue elements are surely worthy our careful consideration if we regard health as essential to our happiness.

THE VALUE OF THE TISSUE ELEMENTS CONSIDERED.

Though these are in no sense medicines, yet their importance will be apparent to the physiologist, to the pathologist, when it is understood that they constitute the entire physical organism, and that without them we could not, as we are, exist. In consideration of this fact, we would invite the attention of the pathologist to the role due them in endeavoring to restore the afflicted to health. Whatever else is indicated in the treatment, these should not be overlooked.

Barring surgery, we are satisfied that due regard to the supplying of these elements when needed, and the proper adjustment of the system to itself, osteopathically, will be sufficient to cure all curable pathological conditions, that are curable at all by any means now known. In Osteopathy we have the means of promoting the circulation of the blood and other fluids of the body in and through their normal channels, and of uniting positive and negative forces which determine the neutralization or the modification of the acids and the



PLATE XIII.—Raising of the Clavicles on Table.



alkalines of the system in their actions in the human body, the adjustment of muscular fiber, bones, tendons, etc., and keeping up a normal circulation of the fluids to and from all parts of the body. The proper coordination of the system with itself means a great deal when it comes to restoration from any and all forms of disease. The addition, the introduction into the system, of the proper elements that are efficient, and the removal of those in excess, surely should be duly considered. These, properly attended to, constitute all that is necessary for any one afflicted with any known pathological condition. This is not only our experience, but seems to be the only rational means necessary to cure our ills. Surgery should have its proper place in the curriculum of remedies, when needed.

It may seem strange to some that we regard medicines as superfluous in the cure of disease, of any sort, name or nature, but upon due consideration of the foregoing there can be but one conclusion, and that is, that they are foreign substances—not needed. If we have everything in the system needed, all of the elements, and the circulation perfect, we do not even need the tissue elements, but in case of disturbance in the circulation of some or all of the fluids, the indications are to take off the pressure. The system has a very unique way of converting its various elements into whatever new ingredient needed, when there are no restrictions placed upon it in the way of undue pressure. The pressure, anywhere, is the thing for the Osteopath to remove, and let nature perform its wonderful processes in its own peculiar way. The how to do this work is the object of this book to explain. This is the gospel of healing.

The different inorganic salts may be classified as follows: Calcium phosphate, Calcium sulphate, Calcium fluoride, Ferric phosphate, Potassium chloride, Potassium phosphate, Potassium sulphate, Magnesium phosphate, Sodium chloride, Sodium phosphate, Sodium sulphate, and Silica. These com-

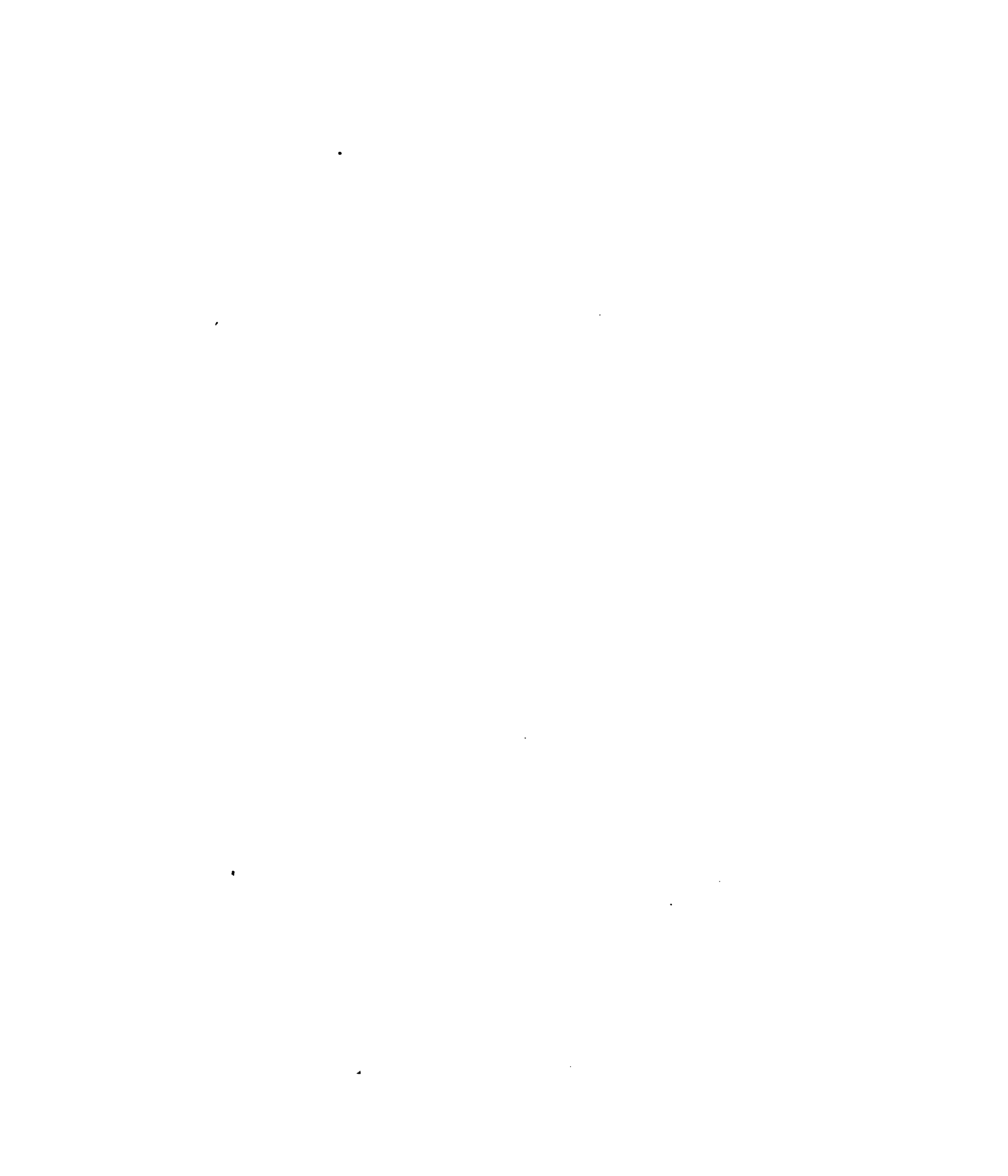
line with Carbon, Hydrogen, Oxygen and Nitrogen to form the different elements, and are the essentials of them.

DO NOT DISTURB THESE ELEMENTS WITH MEDICINES.

The constant changes that go on in the system, bringing to the surface effete matter, to be thrown out through the skin, the large quantity of blood that is flowing into the heart and lungs every breath we breathe, the double capillary action of the liver, the manufacture of the various secretions by the glandular organs of the body, the changes that the blood undergoes in the various capillaries, as it gives off the chemical constituents necessary to supply the waste of tissue in their immediate circle, and then the various degenerative tissue metamorphoses constantly present everywhere, the tearing down and building up of every tissue in the body, constitute phenomena that are indeed marvelous to contemplate; yet all these actions are being performed whether we wake or sleep, and are all made in accordance with perfect precision in every department, provided no obstacles interfere with the circulation of the fluids. The very moment there is interruption, hindrance, sluggishness, stasis anywhere, there are necessarily chemical changes, retrograde metamorphosis ensues, and continues until new material is formed, or breaking down of the tissue results. Hence, the importance of a perfectly free and incessant onward movement of the fluids throughout every department. As the sympathetic nervous system has complete control of every atomic cell, being distributed to each and every tissue, capillary, tube, lymphatic vessel, gland, blood vessel, muscular fiber, etc., throughout the body, and controls and directs motion and sensation, tissue building, elimination, waste and repair, it becomes a matter of no small importance to recognize its freedom from pressure all along the lines of its course from origin to termination. The motor and sensory nerves occupy a secondary or subordinate sphere in the physiological economy, being only servants, messengers, as it were,



PLATE XIV.*a.*—Arm Movement, Patient on Table.



to carry out or execute orders from the sympathetic nervous system. In our philosophy of the action of the nervous system, we may cross the opinions of established authority, and introduce an entirely new phase regarding the cause of disease, but they who follow me through to a legitimate conclusion, will find that my philosophy must be true, in order to prove the science of Osteopathy to be founded *upon rational principles*. A hap-hazard theory of a science, unscientifically and unreasonably presented, would justly receive condemnation, ridicule and unfavorable criticism, hence our premeditation, long study, experience, practice along these lines to demonstrate every possibility, probability, and show to the reader, in clear and unmistakable terms, that its claims are not only exceedingly and intensely interesting, but practically true.

THE HUMAN SYSTEM AS A MACHINE!

From the foregoing it would seem unfitting to call the human system a machine. That term, originated in ignorance, has been perpetuated in ignorance and used inappropriately in reference to the human body without regard to its components. There is no semblance or resemblance to an inert machine, that has neither sense nor motion—simply moved by mechanical force. This body of ours is a part of Deity itself, “made in the image of God,” “a little lower than the angels, crowned with glory and honor.” The Ruler over all things terrestrial, everything subject to him. Machine, eh?

FREEDOM OF CIRCULATION ESSENTIAL.

The freedom of the circulation of the blood and other fluids is essential to the health of the body, or its restoration when diseased.

The normal circulation may be defined as that condition which is natural. The blood is usually recognized as the circulating fluid in the body throughout the arterial, venous and capillary systems, furnishing every part with life (for it is said

that "The life is in the blood"), vigor and motion, and from which is drawn all of the various elements that go to make up the tissue that manifests "the life." To properly comprehend these wonderful phenomena, volumes have been written by the wisest and most learned in the sciences of anatomy, physiology and histology, and ages have been occupied in the research, and speculations mountain high have been made, yet the search continues, each investigator seemingly adding some new theory thereto.

Since the discovery of the circulation of the blood by Harvey, there have been many theories advanced in a fruitless effort to harmonize the various systems of practice, so that the blood in some way would be influenced thereby, and theory after theory has been advanced as to how the blood might be purified; one claiming that this, and the other that that remedy would surely do it; and the craze has raged so vehemently that competitors have arisen who have asserted their compound as the *sine qua non*, and the poor victims of disease have had to test the efficacy of each and every one of these competitors' compounds, until legions have doubtless been consigned to premature tombs, and whited sepulchers now mark the resting places of failures of their "pet notions." Whilst all admit that, to be healthy, the blood should be purified, yet all seem to be at sea as to how this may be done. There is a uniformity of sentiment that circulation somehow influences purification, hence they claim that this or that compound increases circulation, "therefore purifies the fluid circulated." Various methods suggested have been tried, medicines of every kind and potency, singly and compounded, for the purpose of changing the materies morbi of this "life fluid" of the human race.

Why the addition of a foreign substance into the system to "purify" blood ever obtained a footing in the mind of any man, is the strangest thing imaginable! That drugs (medicines) have a pathogenetic effect is conceded without argument, but that they are essential to our recovery from disease

is questionable. That some of them arrest tissue change, others stimulate, others narcotize, blister and purge, seems too patent to dispute. It is not the non-action of medicines that our system opposes, but the action—the too much action—often doing harm instead of the good intended. If it were a certainty, if it were harmless, so that any one could use it as they will finally use Osteopathy, so as to benefit everybody, we would say use it, but we have tried medicines of all schools, and our experience is what many others have had—disappointment, anxiety, death following in their wake too often, when, had we known Osteopathy, many a poor victim who succumbed to the use of drugs in the vain hope of recovery might have lived many years longer than they did—and especially children, whose “summer complaints” carried them off by the thousands, when a moment’s treatment by one understanding the principles of Osteopathy would have cured.

That much more is claimed for Osteopathy than it is possible to verify does not lessen our faith in its efficacy, nor does it intimidate us in our search for every good it is capable of accomplishing. That it fills a niche unfilled by anything else the unprejudiced will readily concede. That there is scarcely a condition pathological that it may not safely, beneficially, be applied in, my experience has verified, and a proper application of its principles will do more for any given case than people unacquainted with it, are willing to concede. That it is a “cure-all,” we make no such a claim for it, and yet, like water, it fits into, and its influences are so far-reaching that it seems to us indispensable, its necessities standing out in bold relief at every pore in the physical economy. Think of a means that completely controls circulation and the forces in the body so completely as to change the action of the alimentary canal to one of alkali and an acid at a single move of the body, or change the abnormal flow of the watery portions of the blood from the mucous membrane of the intestinal canal to a normal flow at one movement of the body. Are not such agencies worthy the highest commendation?

To understand the nerve influences going on in the body at all times, and to know of certain functions being influenced by the stimulation of certain sympathetic filaments, leashes, bundles, or nerve terminals, disease, pain, and often death itself brought to life (or what would shortly end in death)! Colic, flux, diarrhea, hemorrhage, croup, and diphtheria, scarlet fever, meningitis and heart trouble—all of these have been cured through osteopathic treatment, after being pronounced incurable by other systems represented by their leading representatives and teachers. Should such a science be spurned, maligned, misrepresented, simply because of ignorance and prejudice?

If there were no merit in this system, it would have had its day long before now. That there is merit in it is demonstrated by thousands having been cured by it. It is not any longer an experiment, but a proven success, worthy the highest commendation, and receiving the approval of the brightest minds in America, and of some of the leading lights in the medical profession in some of the great centers of this country. That it is often practiced and represented by persons whose intellects are mediocre, successfully, beyond the ability of medical skill to cope with, is a palpable demonstration of its superior merit in the minds of those "who will see." When this book is studied and the manipulations properly mastered, the philosophy correctly understood, many an invalid now environed with hopeless forebodings, will rejoice that help may be obtained. This science has come to stay. It will not down. The combined and untiring forces of every opposition only brighten its already luminous pathway, giving it impetus and strength every time its benign influence is felt by some poor, afflicted, abandoned mortal, whose forlorn, hopeless wailing had died away in the distance. It only needs to be known to be appreciated, adopted, patronized, recommended.



PLATE XIV.*b*.—Continued Arm Movement.

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MUSCULAR CONTRACTION.

There seems to be a prevailing notion among Osteopaths that a "bone out of joint," an "atlas out of place," or a "dislocated hip," is the cause of all the trouble, and a large per cent. of the ridicule this science receives is simply due to ungainly, grotesque, ignorant, commonplace expressions that have been carried from mouth to lip; and the literature that has been sent out through the advertising sheets, styled journals, has not tended to raise the reputation of the science much in the estimation of scientific and thinking people. This science is worthy a better showing, and it is to be hoped that when it is properly presented, the mysteriousness lifted from it, and the scientific, anatomical, physiological facts that environ it lead the people up to know that it is plain, simple, common **sense and scientific truth, worthy the thought of the brightest minds of this or any other age, it will be welcomed as a great boon to all people; then the honorable medical professions will adopt it, use it, indorse it.**

The great fundamental principles upon which the science rests are comprehensible. "Pressure anywhere impeding the normal flow of the fluids," is the motto of Osteopathy. This pressure, as it is denominated, occurs in many ways. The most common cause of the interruption of the freedom of the flow of the fluids is cold. It is a known law, recognized everywhere, that cold contracts and heat expands. This law is recognized by all philosophers, mechanics, artisans, machinists, and everybody who observes. To the osteopathic manipulator this law becomes his polar star, for it is known by him that the contraction of muscular fiber, that impediment to circulation, sets in at once as a result of the lowering of the temperature of the body, and as the cold increases or continues, the muscular contraction continues, or paralysis of the nerves ensues; and the undue relaxation allows infiltration of the fluids in the parts involved, resulting finally in disorganization, degeneration, destruction.

The circulation of the blood occupies from thirty to forty-

six seconds in making its round through the system, and if from any cause the onward flow is impeded, chemical changes ensue, decomposition or disintegration, irritation, inflammatory products or new material incompatible to normal action results, and the consequences are disease. This change is commonly recognized as the "materies morbi" of the blood. A sluggish or impeded circulation often results in a precipitate of some one or more of the acids, and that condition follows which we denominate rheumatism. This usually occurs in the neighborhood of the capillaries. If there are obstructions to the outflow of the glandular system, we have results according to the special office the gland occupies in the physical economy. If in the salivary glands, the throat suffers therefrom; if the thyroid, it enlarges; if the thymus, diphtheria, croup, and a host of other children's diseases are likely to ensue. If there is impediment in any of the smaller veins in the sub-mucous membranes, we have catarrh; if in the skin, eruptions follow.

OBSTRUCTION PRODUCES DISEASE.

If there is pressure or congestion of blood or other fluids on the corium of the brain, in the region of the fissure of Rolando, paralysis ensues, demonstrating the fact that motor nerves have their origin in the cortical substance of the brain. It is strange that so small an area involved will produce such an extent of mischief so remotely. It is definitely demonstrated now that certain areas in the corium have special control of special localities in and over the body. For instance, when an area posterior to the upper end of the fissure of Rolando is congested, it produces paralysis of both lower limbs. Other localities are affected in like manner from the pressure on the corium in different parts of the head, demonstrating our theory that *all nerves* have their origin in the brain. For special cortical motor areas the reader is referred



PLATE XV.—Treatment of Back of the Neck.

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to his Anatomy or to works on the nervous system (Ranney is authority).

Whether obstructions occur as a result of changes in the weather, direct cold, or to continuous exposure of the body, or any part of it, to a lower temperature than normal, or to direct pressure, such as bandages, tight lacing, over-crowded vessels, impediment due to lack of fluidity of the blood, paralysis of nerves controlling the circulation in any or many parts of the body, any one or all of these causes may be and are the cause or causes of the pathological conditions that afflict mankind. Our whole theory has its origin, support, conclusion, on this idea, this fundamental and unheard-of cause of disease, and perhaps unthought-of by other diagnosticians. And while we would not desire to appear dogmatic in this regard, we firmly believe that all pathological conditions are traceable to obstructed circulation somewhere in the system, and that removed, the patient has a better opportunity of recovery than from the possible influence of medication. It surely seems more rational to take off the pressure producing the pain of a morbid condition, than to impose more labor, to care for some other foreign substance that has no earthly relationship with the system, and can not possibly have, with the idea of the necessity involved in the premises. It is like goading an already overburdened animal, or pressing the head of a drowning man under water to keep him from death! Oh, if we could induce the doctors to think!

Undue irritation of a nerve produces pain, if a sensory nerve; increased action, if a motor nerve; an impairment of function, if a sympathetic nerve, or nerve ending in a part. This may be done by contraction of muscular fiber, or muscular contracture may be induced by irritation of the nerve through the sympathetic filaments, and nerve waste may go on to the destruction of the body, without perceptible sensation or pain. Undue contracture may have either of two influences—one that of preventing flow to a part; or, secondly, flow from a part. In the one case nutrition is cut off; in the

other, destruction or impairment of function, due to decomposition of elements pent up, which undergo decomposition for the want of action or circulation. Hence the importance of keeping free the circulation throughout the whole system.

FULL, DEEP INSPIRATIONS.

This is a therapeutic agent of vast importance, not only as a means of expanding the chest muscles, aiding in the purification of the blood in the lungs, and thereby removing many impurities therein through the exhalation that constitutes a part of this exercise, but it is a means of relieving many heart affections, supposed to be organic, when in fact they are simply functional troubles. Melancholia, sleeplessness, indigestion, bad colds, chilliness, insipient tuberculosis, and all other conditions dependent upon the proper use of the chest muscles are greatly relieved, and often cured by this means. There are many of our manipulations made expressly to expand these muscles, as well as to expand the lungs, and thereby oxygenate the blood. Remember that "the blood is the life of man," and that to retain its vitalizing influence nature has provided a positive means of accomplishing its purifications, and it must be done in its own way, or diseases follow. The proper way to fill the lungs is to close the mouth, draw in air, fill the lungs to their fullest capacity, easily, steadily, holding it in the lungs a few seconds at first, increasing the time between taking it in and expelling it from the lungs from thirty to fifty seconds, letting the air be expelled through the nostrils gradually. This exercise should be taken at intervals of two to three hours during the day, six or eight such deep inspirations at a sitting. At first the effort will be somewhat exhaustive, but resting a little while and renewing the effort will surely bring its rewards. The reparation of the system will soon be noticed, and malnutrition and impaired assimilation will be greatly improved, if not restored. This practice not only expands the lung tissue, fills the air cells, but it strength-

ens the respiratory muscles and deepens the chest capacity. The nervous system will be strengthened and made more firm, the blood and tissues generally will be enriched, and the liability to take cold lessened. When it is known that there are many persons who scarcely ever utilize all of their lungs, and that the upper lobes under the clavicles are little if at all used, and that this apex portion is weak, respiration scarcely perceptible, the upper portion of the chest walls flattened on both sides, digestion feeble—that such persons may be transformed into strong, rugged, round-chested, symmetrically proportioned bodies—this exercise will take rank as one of the very best means of preventing many, very many diseases.

There is more in this practice than the ordinary people, and even the physicians, have thought of, and its importance will be enhanced when its benefits are properly understood, realized. This may be said, that a systematic attention to the right sort of breathing constitutes the larger part of hygienic measures necessary to good health, happiness, longevity and the restoration from many of the ills of the flesh that now are to be witnessed everywhere. The exhausting efforts of daily life are usually due to lack of lung expansion, due to lowering of the vitality of the blood, for want of oxygen. The proper expansion of the lungs in all directions is essential, and this may only be had by due attention to breathing. Constant physical exercise in lifting tends to draw the muscles down, while deep, full inspirations expand in all directions—lungs, chest and muscles as well.

DEFINITIONS.

DISEASE.

Disease is any departure in the system from a normal condition, or standard of the structure or office of any part of the body. It is termed **Organic**, when associated with an organic change in the normal structure, and **Functional** when simply the office is disturbed, and no change is perceived in the structure of the part.

PATHOLOGY.

Pathology explains the origin, cause, structural changes, history, morbid conditions, etc. Study of individual diseases constitutes special pathology. The nomenclature consists in naming the diseases, and this is usually intended to define the locality and condition involved, as well as name of structure implicated.

ETIOLOGY.

This is generally applied to the subdivision of general pathology which treats of the causes of disease.

HISTOLOGY.

As this has to do in the treating of the minute anatomy of the system, microscopically, it is not of much use to the general practitioner, and should be studied by the physician separately.

SYMPTOMATOLOGY.

This is a term that signifies "signs of disease." A careful study seems necessary. The symptoms of morbid changes vary according to intensity of or character of the alterations in a part and the structure involved. The evidences of changes manifest themselves by special signs or symptoms, and are objective when seen by the observer, as in redness.



PLATE XVI.—The Flux and Diarrhea—Movement for.



swelling, temperature, mobility, etc., and subjective when known or felt by the person afflicted, such as numbness, pain, vertigo, nausea, etc. The study of this subject is the most interesting of any to the practitioner, for a knowledge of the symptoms renders certain in his mind the character of the disease and the locality, as well as the means to be employed in the treatment of it. The complications, sequelae, etc., should be considered, for they often have to do in the regulating of the kind and character of the treatment to be instituted.

DIAGNOSIS.

This is the science of discerning the nature and character of the affection, the exact comprehension of the case, origin, seat, nature of morbid conditions.

PROGNOSIS.

To prognose a disease is the ability to tell its probable ending, and this can be done only by long experience and observation from clinical cases. Prognosis depends largely, sometimes, on the nature of the means employed in the treatment. Many diseases that were thought to be incurable in former years, by certain methods, are now treated successfully by others, so that our prognosis depends largely upon the means employed in the treatment.



PLATE XVII.—Showing Flexion of Lower Limb.



Osteopathic manipulations, or disease, its cause, treatment required, where to apply it, or anything about it. More devolves on an understanding of the action of the nervous system than the "luxation of the atlas." It has been a question with me since my attention has been called to investigate the nervous system, whether our physiologists have not come to hasty conclusions about how the nervous system controls. Looking over various authors regarding this matter, we find that all are of the opinion that the cranial nerves originate in the head. There is no difference as to the origin of the spinal nerves starting from the medulla oblongata, but there seems to be confusion as regards how sensation, motion and sympathy are carried on. The most of them assert that nerves branch, and that these branches have separate offices to perform, and that fibers run to certain localities, form ganglia, and from these ganglia new influences are generated, new nerve fibers originate, and are thus regarded throughout the whole system; and that because a nerve terminates in the tongue it must necessarily be a nerve of feeling. From long observation we have come to the conclusion that, to make out a rational system of nerve distribution, the literature on this subject should be worded differently, or entirely rewritten.

Not wishing to appear presumptuous or egotistic, but somewhat original on the plan of distribution, control and origin of the nervous system, I make this startling and entirely new assertion: All nerves originate in the brain. I assert this as an axiomatic, foregone conclusion, for the following reasons: First, the nervous system consists of bundles of fibers, composed of the same substance as that from which they originate—similar in structure as the brain itself—including its coverings, arachnoid, pia mater, dura mater, etc. These fibers convey intelligence to the parts to which, and in which they are distributed, and only influence at their ends, and through their footlets or terminals. Each motor and sensory nerve coming from its origin in the brain from whatever locality, ends with a sympathetic footlet, and through

this sympathetic fiber intelligence is communicated, direction is given there, impulse received, execution of the order at once ensues. To make this matter plainer, suppose the submaxillary gland should be required to generate a secretion to moisten the mouth—the mucous membrane there—and to mix with the food; what action does the nervous system perform? In the divine economy regarding the human system certain glands manufacture certain kinds of secretions, and others manufacture other sorts of secretion; all of which go through their normal outlets, to be appropriated accordingly. Now that perfect order may be had in this particular gland, it must be superintended by mind, and we will suppose that this mental influence is conveyed through the sympathetic nerves, as they of themselves have no sense, either of feeling or motion; the thought, starting at the origin of the line of communication, is transmitted to the farthest end of the line, and there ending in a footlet directly in contact with a motor footlet—one of the servants of the sympathetic—the executor of orders from the sympathetic; and through a laboratory of wonderfully complex construction, through which the blood passes, there is required to be manufactured a certain chemical (alkaline, for instance). This sympathetic nerve superintends the selection of the basic principles from the blood that make up this compound, and then sees to it that every detail is carried out, so that a perfect adaptation to the purpose intended is consummated. Who is ready to assert that all this comes by accident?—especially when the same thing occurs in every other department in the manufacture of every other organic substance the whole lifetime of the person whose body this sympathetic nervous system controls?

The nerves should not be understood as starting from ganglia or plexuses, for that would be admitting that each ganglion would be a nerve center, and this would make confusion worse confounded all over the system. While it is said by Dr. Watts that "The Lord works in mysterious ways His wonders to perform," we find that all of His ways are accord-



PLATE XVIII.—Manipulation of Sciatic Nerve.



ing to the very strictest order, carried out to perfection in every detail. To assert that we have twelve nervous systems in the head, and thirty-one separate nervous systems in the spinal cord, and a chain of them in the abdomen, would not comport with facts, nor be at all consistent with reason.

It is said by all of the authorities examined, anatomists and physiologists, that the nerves have "branches." A more inconsistent idea could not be advanced, when we take into consideration that all nerves influence action at their terminals, and that a direct line of communication must be had from origin to terminus before any execution can be effected. To understand this matter fully, we will suppose—and that it is a fact—that nerve fibers originate in the brain as separate and distinct lines of communication for a special and distinct purpose, to connect with terminals of other fibers, which also start in a nerve center in the brain, and these separate fibers end in every tissue in the body, not being disjointed, relayed, resupplied in ganglion, but each fiber has a separate and distinct office to perform in the human economy, directed by a Divine Mind, whose control is ever omnipresent—everywhere in the body, seeing that every detail of every order is carried out to exact precision. Starting at the corium we have fibers terminating in the tissues all along the course of the line, like a bundle of fine thread or hairs of different lengths, cut off along the wisp, as it were, and the longer ends continuing to the farthest-off recesses of the body. This is easily understood when it is shown that a congestion of the corium on the top of the brain receiving an extra supply of blood from a bruise, paralysis is instantaneously produced on the opposite side of the body clear down to the end of the hallux. Each and every chemical change that takes place in the system everywhere, of every kind and character, is the result of nervous action, or mind acting through it. This we understand to be the physiological action of the nervous system, and, regardless of our will or nil, awake or asleep, is essential to our physical well-being. These facts understood, furnish

a whole lot of information in the direction of our comprehension of what disease is and how it is produced. The circulation of the blood, containing the inorganic elements in solution, is not only controlled by the Sympathetic Nervous System in the larger vessels leading from the heart, by controlling the peristalsis of the muscular walls, but into the finer arterioles and on into the capillaries, and mysteriously selects from it, while passing through the capillaries, such elements as are essential to the building up of material in the immediate vicinity of the capillaries, but marshals the waste material in due order and directs its onward course through the lymphatics on and into the veins beyond the capillaries, to be carried back to the heart, but continues its superintendence over the elements thus drawn from the blood in the capillaries, placing each atom in its proper place, so that the whole system is renewed at all times and all places at the proper time, everywhere in the body. The sympathetic nervous system is the great one that presides over all the functions in the body. It is called "sympathetic" because of its intimate relationship with every other part of the body. It superintends and energizes all of the processes of growth, repair, tissue building, respiration, circulation, and the elimination of the waste material from the tissues.

"It is the sleepless sentinel who stands at the gates of life as long as we live, even a hundred years, and never sleeps for a single moment, night or day. Nothing short of lethal doses of narcotic or anæsthetic drugs can wrap it round in slumber robes and stretch it on its dreamy couch. It never sleeps but once, and that eternally. It is that body servant of yours who never deserts you nor quits your service night nor day, for a single moment, while you live; a friend that truly sticketh closer than a brother, watching every heart-throb and every breath you draw. It is that butler of yours who, without orders from you, looks after the nourishment of every bone, muscle, nerve and tissue of your body, and provides you with every well-spring of thought and emotion. It is that deft

artisan who oils every joint in your frame, and keeps it from cracking and rasping with friction and loss of mobility; who lubricates all of the surface of the body, internal and external, so that it does not dry up and crack to pieces, nor drip with excessive unction. It is that faithful servant who without murmuring pumps your breath and blood for you through the long hours of the night while you sleep, and through the busy hours of the day, when you are too busy to think of breath or blood. It is that janitor of the temple of your soul who keeps up the fires in your bodily frame and maintains 98½ degrees of temperature throughout every department of the 'house not made with hands,' through summer's heat and winter's cold, whether you live in the tropics or 'on Greenland's icy mountains.' It is that cunning servitor who always stands at the window of your eye and opens and closes the iridescent curtain of the iris so as to let in just so much light as to enable you, in the glare of noon or the shadows of twilight, to see with comfort and pleasure all the beauties of the world around you. It is that faithful warden who stands at the gateway of your stomach and reports instantly to the brain whether you, in your ignorance or stupidity, put into your mouth a delicious fruit or a corrosive poison. It is that cunning mechanician who sees to it always that your blood, as it courses furiously through its channels, is composed of so many white and so many red corpuscles, and that each corpuscle carries with it so much lime, sulphur, phosphorus, carbon, oxygen, hydrogen, and nitrogen, and all of the other primal elements of your body in exact proportions, and sees to it, when they each lay down their burdens at the gateway of life, each atom thus carried into the economy by unerring selection, is built up into frame and wall and member and tissue of your body, always renewing life in the midst of death throughout the citadel of your being. And that same wise warden looks to it that every corpuscle or atom, on its return journey through other channels, is loaded with worn-out and effete materials, to be carried out of the great temple of life, to again mingle with

the clods of the valley. This nerve is the invincible defender of the fortress, who, amid the havoc of shot and shell, of saber stroke and leaden ball, the shock and concussion of collision, the delirium of typhoid and the wreck of insanity, still guards and protects and repairs the breached fortifications of life. Through all the infinite vicissitudes of life the great Sympathetic is still our best earthly friend and benefactor. It is the great clock in the temples tower that calls for every passing change of life, wound up to run a hundred years; and as it ticks your allotted time, it marks the age of speechless, puling infancy, when you can neither understand nor tell your own wants; it measures off your youth and strikes the hour of manhood; it calls you to the mystery and mating time of love; it rings the dinner bell each day of healthy life and calls the hour of sleep and rest; it changes the epoch of gray hairs and slower gait, of waning vision, of shrunken shanks and biceps; it sets your voice in piping tones to prating of the times that were, the deeds of former days, and youthful prowess, and when those deeds are told, you sigh and say, 'Ah, me, I am growing old.' And then, some day, when ripe and ready for the change, it rings the curtain down and closes up your stage from mortal gaze, and as one who quits a tenement long kept, and gives it over to worms and mould and dust, to cobwebs, bats and flies, its wheels turn slowly round, the hammer fails to strike; the hours are tolled, and this same friend goes out from long control to terminate a long career, lies down itself and goes to sleep—that sleep that knows no waking. Then swift decay comes and covers all with mould, and orders with dispatch assimilation with the clods that heap the valley, and leaves you there, with time, the elements and God. Who can comprehend its greatness, its countless capabilities, the vastness of its service, or the infinitude of mind that planned and constructed it?"

The above but feebly outlines the vastness of the functions of the sympathetic part of the nervous system. Opening the avenues a little wider, starting with the first impulse

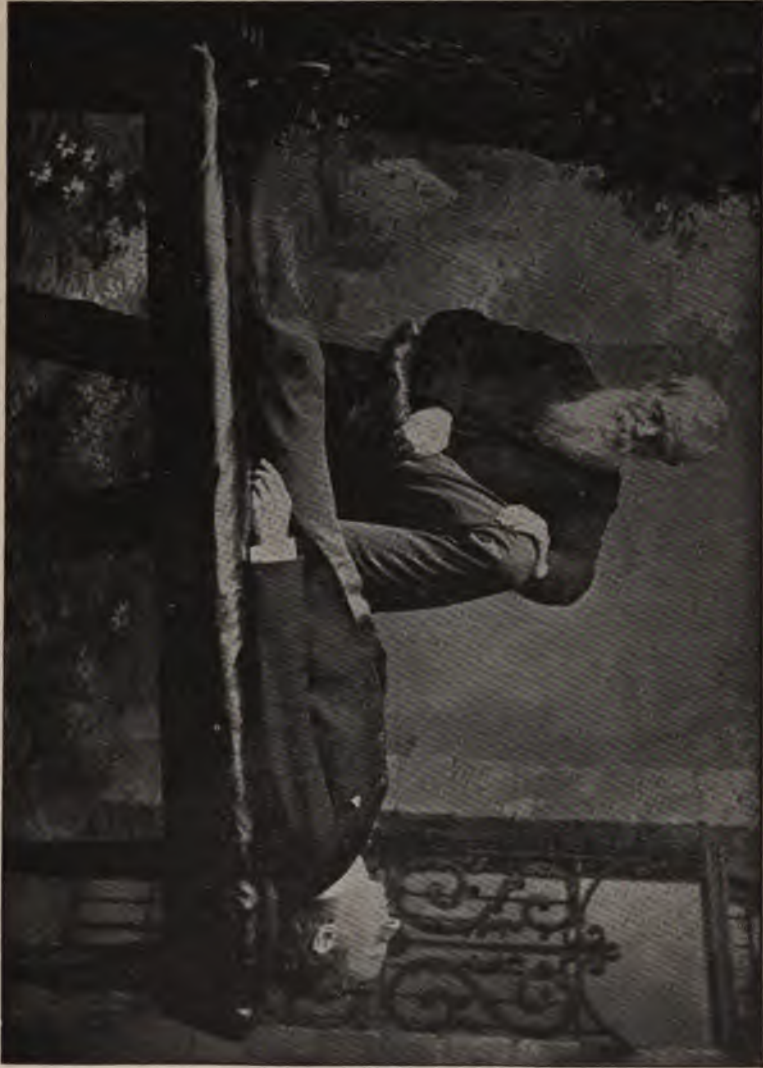


PLATE XIX.—Vibratory Movement of Knee and Hip Joint.



noticeable in the functions of the cranial nerves, we perceive the sense of smell, then of motion, sight, feeling, tasting, seeing, hearing, all being special senses. These are marvelously wonderful. Then to trace the process of digestion, absorption, assimilation, manufacture of new material, the removal of the old, the chemical changes that are constantly going on in the whole body, opens to us a field that expands as we enter wider and wider, and this subject becomes the more interesting when the causes and the cure of disease are considered. Osteopaths claim that when all of the fluids are freely, normally circulating through their proper channels, all of the muscles are in their normal condition, and all of the nerves are free from pressure, health is the condition experienced.

THE VASO-MOTOR NERVE CENTERS.

It is said that such a thing exists in man, and to have its origin in the medulla. The exact center is supposed to be slightly above the calamus scriptorius. Recent observations concede to this set of nerves the power to control innervation of blood vessels, and that there are in this system afferent as well as efferent fibers. It is also said that the afferent set irritated excite or depress the activity of this center, and in a reflex way cause contraction or dilatation of the blood vessels. We are informed by anatomists on this subject that on irritation or stimulation of these filaments atonic contraction of the walls of the blood vessels occurs, and we are also informed that irritation of any sensory nerve of or in the body results in general contraction of the blood vessels, and that there soon occurs a relaxation of the walls of the vessels in the immediate vicinity of the parts irritated, that this activity is perceptibly decreased when the pneumogastric nerve is irritated.

That two actions occur or are the result of stimulation of the vaso-motor nerves generally is not yet thoroughly settled. The vaso-motor and the vaso-constrictor fibers both occupy-

ing the same sheath may be, but that one set of fibers carry two sorts of influences does not comport with observation. That the sympathetic nerves are all vaso-motor we incline to believe, because they surely control all action in every part of the body. That some points are more vulnerable than others is conceded. That there are certain fibers which terminate around the great openings of the heart and control its action and all of the blood vessels, the circulation therein, is true; but do not other sympathetic nerves end in other important structures and control them? When it is understood that all motion in the body, when controlled at all, is controlled by the sympathetic nervous system, we shall not be greater sticklers for a vaso-motor nerve center than we shall be, or ought to be, for a brachial plexus. The important practical point for consideration by the practitioner is, that we influence action in the blood vessels by stimulating the surface, skin and deeper structures in the neck, in the region of the occiput, and down at the sides of the spinous processes for three or four inches, embracing what we term the cervical plexus, or the ganglia along the sides of the neck. A steady pressure with thumb and fingers influences circulation. The degree of pressure governs results. A slight pressure stimulates, a hard pressure inhibits, slows heart's action, lessens irritation, or it ceases, and fever subsides by pressure in this region for a few moments. That these filaments convey influences to the heart and thence to the muscular walls of all of the blood vessels, seems to be a fairly well established fact. This is another step in advance of the use of a febrifuge in the way of medicine, and is used by the Osteopath successfully in treating fevers of the highest temperature and of the most malignant type. Strange indeed that we should be so slow to learn that the means for our own, as well as that of our neighbor's welfare are always within our grasp, if we only knew it!



PLATE XX.—Showing Adduction of Thigh.



NERVE CENTERS.

In the treatment of diseases osteopathically, it is claimed by many (ignorant, of course, of the fact) that certain nerve centers—for instance, those that control action in a vital organ—are reached or stimulated directly by contact along the spine or back of the neck, and therefore osteopathic treatment “consists in treating nerve centers.” A more erroneous statement could not be made. It is wholly devoid of truth. When it is an established fact that all nerves have their origin in the calvarium, the assertion that we reach nerve centers by manipulations, directly, is too palpably untrue for ordinary intellect to entertain. That certain definite results follow the manipulations of the body in different localities, in the various methods used by Osteopaths, is true, but why? Not on account of the treatment or stimulation of nerve centers. We exercise influences that we have no conceptions of in our manipulations, but that certain results follow certain manipulations is often demonstrated, but how they are brought about in the system is as obscure as the sun at midnight. Anatomy of recent years has taught us that nerves convey influences from a given center to a periphery, and that they in some way control action, sensation and sympathy. Observation confirms this notion or fact. Osteopaths are founding a system of healing on the basis of nerve influence, and investigation becomes interesting along this line, for “our craft is in danger” if it should be proven, and mysterious drug action will be abandoned, and reliance will be no longer had on them.

Starting at the base of the occiput, then, we begin our treatment of all diseases, for the simple reason that disease is the result of disturbed action of the source of vitality—that vitality is “in the blood,” and here, at the base of the brain, in the cervical region, we find terminal nerve filaments that, if stimulated, control the circulation of the vital fluid—the blood. The blood containing all of the inorganic elements from which is drawn the substance that makes organized tissue, it is essential that the unorganized elements be carried to

the various parts of the body needing said elements, and as they are only carried there in the blood, and that through arteries, and that the action of the walls of these vessels wholly depends upon nerve influence, it becomes apparent to the observer that it is essential to know how to influence nerve action.

The sympathetic nervous system superintends and, as we contend, controls every action in the body through the motor nervous system. The union of these two at their terminals constitutes a quorum—the sympathetic directs, the motor executes. Therefore, in order to carry on any process in the body, these two nerve terminals must have connection with each other. A modified or retarded suggestion by the sympathetic, and a sluggish execution of the order by the motor nervous system, produce all of the pathological disturbances known as disease. This will explain to the pathologist much that has heretofore been conjecture. These premises are self-evident. It is said that certain secretions are manufactured in certain glands by the sympathetic nerves; but has any one explained how it is done? It requires two forces in nature to accomplish anything.

THE ROLE THAT THE SPINAL SYSTEM OCCUPIES IN THE TREATMENT.

The spinal cord is not merely a channel to and from the brain, but regionally there are certain endowments that become of primary importance to the Osteopath. After leaving three or four of the cervical vertebrae, as we descend, every portion becomes a source of great importance. There are regions that, being influenced, reflect that influence in such a way as to demonstrate the supreme control of the portions of the body corresponding to the distribution of nerves emerging from the spinal regions. These important starting points in the treatment of disease determine results. Disease in parts supplied by spinal nerves may generally be located by

the presence of tender spots along the spine in the locality of the emergence of the nerves leading to and supplying the parts pathologically concerned; hence become an index thereto. In the distribution of the various filaments therefrom we have another evidence of unvarying uniformity of supreme supervision of the house we live in. Through these filaments, beginning at the foramina in or along the spinal column on either side, and inducing proper stimulation, we have learned, starts up new life in the parts supplied by these nerves, and diseases thought to be incurable by other means disappear.

The thirty-one pair of nerves that emerge from the spinal column exercise influences little understood by the large majority of people, and, we opine, by the medical world. From the three or four upper dorsal and the four lower cervical regions, starts out a force from the brain that invigorates the entire man, starting into activity vital organs, and perpetuating their action beyond human computation or imagination. The various seats of the energies of the whole man seem to, and do, come out of these foramina. For convenience and practicability therapeutically, we prefer to divide the spinal column into six grand divisions, to-wit: The Cervical, Brachial, Dorsal, Lumbar, Sacral, Coccygeal; the Cervical embracing the four upper vertebrae; the Brachial three lower cervical and first dorsal; the Dorsal the first dorsal and including the twelfth; the Lumbar the five lumbar vertebrae; the Sacral all of the sacrum; and the Coccygeal, the last, including the last set of ganglia on the inner side of the coccyx, called the ganglion of impar. With these divisions we have to do in the treatment of diseases of all forms and conditions, and through these various divisions we exercise influences that result in such marvelous cures as astonish the world. To study and to know the distribution and special functions of these spinal nerves qualify us to practice the healing art with a certainty not heretofore reached by any other method.

Whether influences start from the pressure directly ap-



PLATE XXI.—Conclusion of Movement Shown on Plate XX.

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all kinds; but the intelligent in the ranks of Osteopathy are ready to concede the causes to other sources, and now it is a pretty well settled fact that dislocation does not play such a role in the production of disease as formerly. Some signs begin to indicate a practical, physiological disturbance as the general factor in producing many of the ills that "flesh is heir to," and that a bone does not have to be "set" in every case that comes to us for treatment. The world surely "do move."

Theories about this and that cause of disease have been advanced, adopted; learned intelligencies of all schools have written great volumes to elucidate them, and time has shown their fallacy, and many remain as spectral ghosts to haunt mankind which in time will share a like fate. The masses bear the ills rather than fly to others they know not of. The education of the masses is the hardest work—the most difficult task to do, for it is with the people these new systems have to do, and the proper presentation of plausibility for their rejecting the old and adopting the new, is a herculean task. Solomon said a long time ago that "there is nothing new under the sun," and for fear somebody should rise up and present something new, the people, with one consent, decide not to investigate, for fear Solomon might be found to be mistaken.

The reader need not lose any nerve force on this proposition, for we have nothing new under the sun—for this has always been under the sun. Since Adam first exercised the prerogative of mobility, and demonstrated that locomotion could be made with his shanks and biceps, our system has had a place in the Divine as well as human economy.

It is not a matter of concern with us about reaching nerve centers directly, for these are inside of the brain, and inapproachable by direct contact; but that influence is conveyed from the terminals to centers there can be no doubt. When it is understood that nervous influence is exercised at *the ends* of the nerves, we may readily see that there is reason in stimu-

lating nerve terminals. That there is a sudden change of the secretions in certain organs through the stimulation of nerves along the spine there is abundant proof. We reach the stomach, through the splanchnics by stimulating the dorsal region in the neighborhood posterior to the stomach, neutralizing an excessive acidity instantaneously, and relieve colic. We influence the terminals of the sympathetic filaments along the spine in the region of the twelfth dorsal vertebra, and exercise an influence over the secretions of the kidneys. We irritate or stimulate the lumbar region about the second lumbar vertebra, and an influence is exerted in the genital organs. These are some of the examples which fully demonstrate our philosophy of cure. Take, for instance, a case of excessive secretion of urine: we possess the ability to regulate, by simply stimulating certain portions of the lumbar terminal nerves, in a certain locality, beginning at the right place, and following up the stimulation in the proper direction. All other excessive secretions are controlled the same way. Nervous influence is the proper influence to bring to bear in the cure of all diseases. The nerves themselves are controlled by other nerves, and the smallest imaginable molecule of every atomic cell is under the direct influence of the sympathetic nervous system, and when we properly understand how to utilize it, direct it, relieve it of any and all abnormalities—in a word, know when its functions are interfered with, where, and know, too, how to right it, disease is simply under our control. The marvel of marvels is, how does the nervous system perform such wonderful things? To the student of nature who accepts demonstrations as proof, it can be readily shown that intelligence must permeate every tissue in the body in order to look after the building up, repairing the waste, taking care of the worn-out material, and looking after every department as needed, in such wonderful precision; and that this mind must have a perfect system about it or confusion worse confounded would soon end in chaos. It takes just so many elements to constitute the human system, and



PLATE XXII.—Showing Abduction of the Thigh.



these must be in exact proportion, and be held in solution during their passage through the various channels, and must give off exactly so much of this and so much of that particular element at the proper time and place, in order to maintain the weight, constituents and office of the various organs at all times, in all altitudes, countries and climates—and hence mind must be a prime factor in the business; and we insist that these nerve channels are the media through which this mind executes its will. If the communication is free from start to ending, the functions are properly performed; but if interrupted, intercepted, confusion reigns, and the degree is always in proportion to the quantity and quality of the obstacle or obstacles to be overcome. Hence our motto, "Take Off the Pressure."

NERVE FORCE.

There is much said about Nerve Force. What is nerve force? It surely seems to be some inherent power in the nerve that is exercised by the nerve itself. That we have any nerve force is an assertion without proof, or even the semblance of truth. There is an expression equally as meaningless—Nerve Waste. What does that mean, if not the wasting of the nerve itself? There are so many terms used that confuse the mind, meaningless terms, that we are often at a loss to know what is meant by them. The best way to express anything is to state exact facts. What is nerve force? What is nerve waste? When we properly understand that nerves are only the channel through which force is conveyed, and that force is the result of chemical changes, and that chemical changes are the result of mixing chemical elements, we shall begin to imagine what the term "nerve force" signifies. Cut off the supply of the material that constitutes force, and you have a waste. Where does this supply come from? From the food eaten. These forces, then, come from the food eaten, chemically changed during the process of digestion,

assimilation, circulation. The circulation embraces general and special circulation, mixture and admixture, combination and recombination in every department in the physical organism, and organizes and disorganizes, renewing and changing forces constantly. The little tubes we call nerves are only the conductors of the intelligences carried on everywhere in the body at all times. The arterial set of tubes carry the material outward, distributing the material to the remotest confines of the various parts of the body, and the other tubes, called the venous system, carry it back to the great center—the heart, constantly, so that these conditions called waste and supply go on all the time. You may now understand what is meant by nerve force, or nerve waste. Freedom of the circulation means building up, impeded circulation means tearing down—retrograde metamorphosis. There is no force in a nerve any more than there is in a bone. The medium through which a force is conveyed is not the force. To say that we lose nerve force is to say we lose all force in the body, or some force. Does it occur to the reader that the letting down of the system in any degree or the rousing of it in any way is the result of the chemical changes that take place in the elements? If that is not understood, the comprehension of the meaning of disease has not dawned upon the mind of the reader. We assume that this body is a cosmos—a world within itself—of the world chemically, materially, so far as our bodies are concerned, and that our spiritual man is only an inhabitant endowed with personal, entire control of it, and that these tubes called sympathetic nerves are the connecting links that unite every department with the central station, and that through these various tubes is communicated, in a normal state, the intelligence needed everywhere in the body, to all of the material carried there through the arteries, even to the regulating the caliber of them.

The manufacture of the various fluids in the different parts of the body is superintended by the intelligence conveyed through these nerve tubes, and we are wont to call this

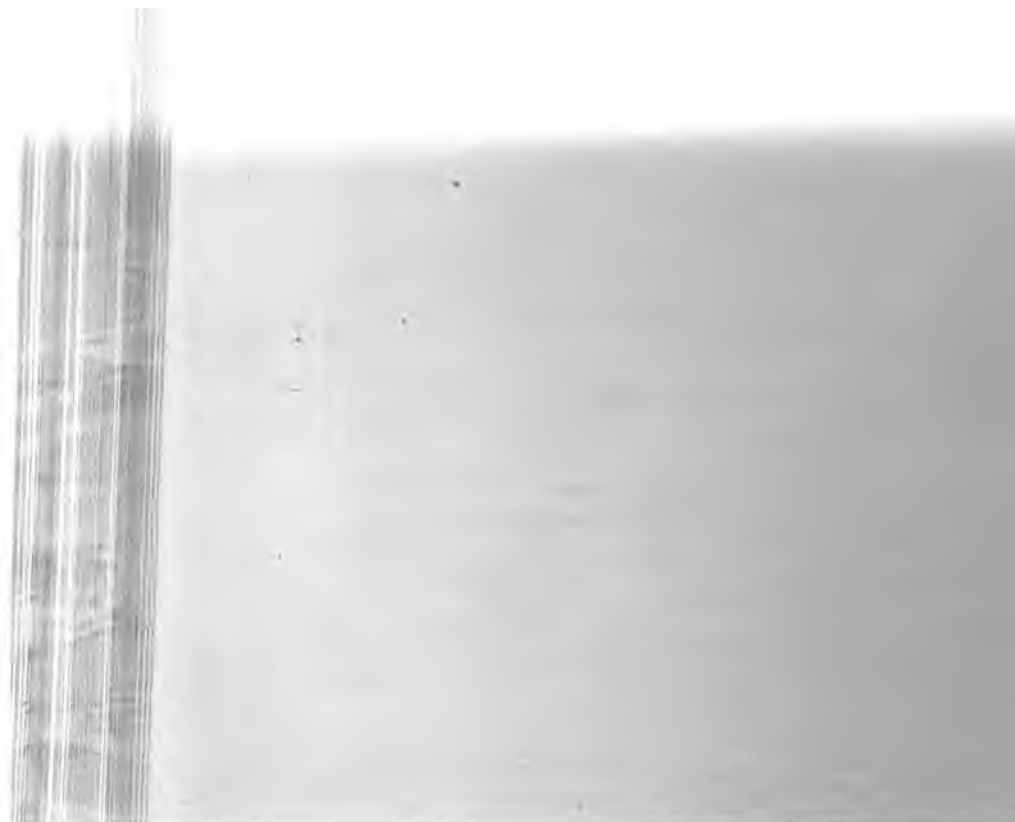
intelligence nerve force. These minute tubes, filaments, originate in the brain, are connected with the minutest portions of every tissue in our body. How intelligence reaches the various parts of the body through these tubes we may never comprehend, but that it does is not now questioned by physiologists. How this element called Neurin is manufactured, we can not tell, neither do we know how sulphur is generated in the muscular fiber, yet analysis has demonstrated that to be a fact. That the channels through which we are said to receive intelligence are five is a pretty well understood fact; but how is it deposited in or upon the tablets of the brain, subject to our demand for use, is a mystery to us all. Something from without finds its lodgment through these avenues that we call thought—intelligence; this, we are taught to believe, is thought—knowledge, intelligence. That is what we assume is the power within the physical organism that controls every department we call the body, through these organs we denominate nerves. Cut off the communication anywhere along the lines of their distribution, or abridge their sphere of action by change of structure in their chemical constituency, and you have what is denominated disease. Muscular fiber may be affected in the same way; so may any other tissue in the body be thus changed; and the change in the molecules of any element produces a change in every other part of the system, because the system is a unit—a cosmos. These changes result as a consequence of sluggish or impeded circulation of the fluids of the body anywhere, in any and every structure. The chemical changes resulting from decomposition of blood cells, as they are termed, are in proportion or exact ratio to the tissue involved, parts affected, locality and organ involved. In some instances we have fever as a result, in others a paralysis, in others a constipation, and in some others a diarrhoea, in another insanity. The nomenclature of disease is, and always has been misleading, and the treatment seems to have had reference more to the name than to the real pathological condition. The comprehension of the phil-

osophy and the true state of the case, as taught in this book, according to the real facts involved in the science, reveals causes as they are, and not after some hypothesis, and at the same time states fairly and fully the means whereby the causes may be removed. There are no clear-cut, comprehensive methods to be relied upon in the various systems purported to be remedial, but in most cases a "try potency," and if that doesn't do, try again. There are many remedies that have had their influences, and doubtless oftentimes seemed to satisfy both the doctor and patient—at least something was being done, that no doubt relieving the condition satisfied. We are not trying to disprove the efficacy of other systems, but to show up our own. The superiority of our system is the subject under discussion, and we expect to prove it to the satisfaction of every reasonable minded reader—as a drugless system of healing.

The metabolism and anabolism, as results of chemical changes due to the intelligence conveyed through the sympathetic nerves, are instances of the Divine mind—the omnipotence and omnipresence of an overruling Director that is ever superintending all His works in righteousness everywhere. To think of chemical changes going on everywhere in our body all the time, directed by an unseen, unfelt power, is indeed marvelous to contemplate. The same sort of mysterious change goes on all of the time in all this beautiful world we live in, and in all things in the world—in everything. It is simply an effort, or an action, on the part of the Osteopath to remove whatever obtrudes itself in the way of these agencies which keep up these marvelous and mysterious changes that, in a normal condition, produce results seemingly so opposite, and yet so harmonious that there is harmony everywhere, and yet a constant building up and tearing down of the material that constitutes bone, muscle, ligament, cartilage, hair, nails, skin, nerve, artery, vein, and gland, and all of the other tissues of this body of ours. To assume the prerogative of being able to mend the ways of Deity is surely most presumptuous on



PLATE XXIII.—Conclusion of Abduction of Thigh.



the part of the created. It is not the object of this book to explain the author's theological views, but to show that there is something that we call Deity that we recognize as supreme, and that wisdom manifests itself in the direction of each atomic cell in the body. That this organism, this wonderfully marvelous structure, is a machine, as some would have us believe, does not comport with facts. If we could but lift this science from environments, out of the association of ignorant pretenders, whose sole aim in life is to mystify, to relegate its discovery to some unlettered, ignorant "witch of Endor," or some spiritualistic medium, who claims control of some Dutch-Indian spirit of modern times, or perchance in the Olympiad days of long ago, and that it has come on down the ages, touching and enlightening the minds of an occasional "mediumistic forecaster," and that within a very few years past it was discovered that "dislocation of bones" caused all the pathological discrepancies that flesh is heir to! The principles belonging to this science are physiological, anatomical, easily understood, taught, and rational, and need no mysterious mantle to obscure its meaning or cover up its scientific results. To say that all of it is discovered is to deny science, literature, philosophy, progress in knowledge. To say that it, under its present status of development, can not be improved, or a better manner of applying it improved upon, is unreasonable, untrue.

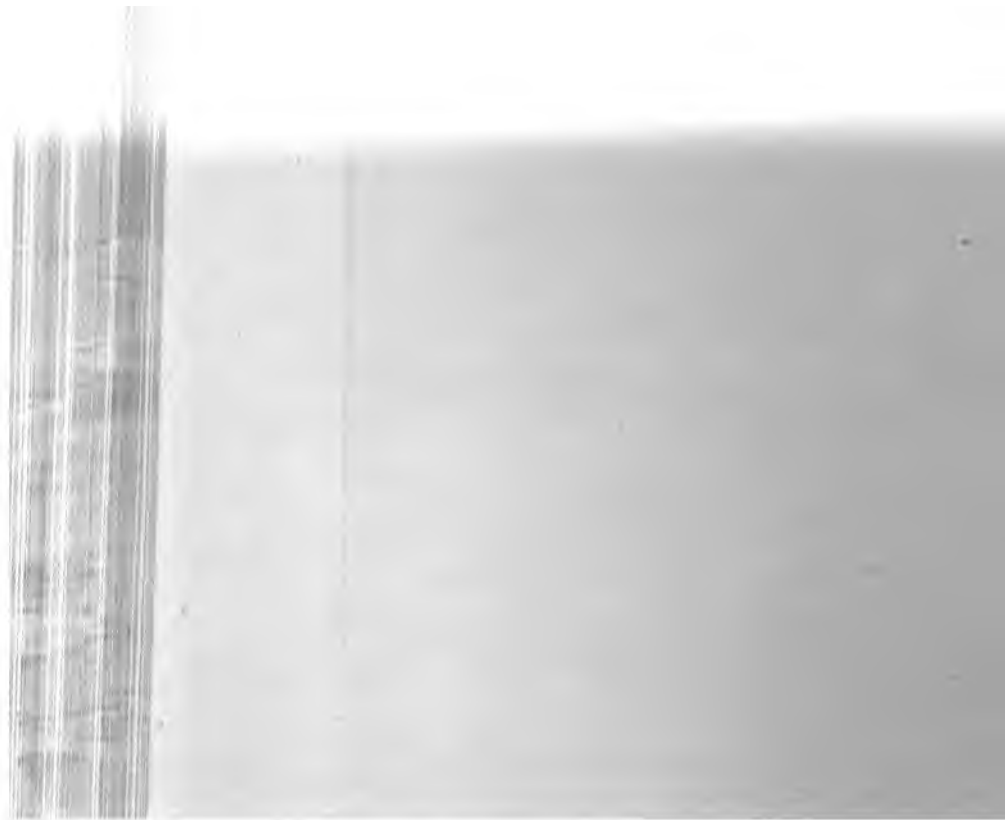
THE NERVOUS SYSTEM AS A GUIDE TO DIAGNOSIS.

Beginning at the atlas—the junction of the occiput with the neck—we learn that we may start influences by manipulations that determine pathological conditions elsewhere, and that through a proper stimulation of terminal nerves we may control the action of various vital organs almost at will, depending largely on our knowledge of the nervous system. Here we impress the vaso-motor nervous system which seems to exercise such a marvelous influence over the peristalsis of

blood vessels, starting influences at the orifices of the heart, and thence along the muscular fiber of all of the arteries in every part of the body, completely controlling the caliber of the same, their peristalsis, the quantity and flow of all of the fluids in every department of our body; said to exercise two separate and distinct influences—afferent and efferent, conveying these to and from the heart; somehow influencing the whole system in such a manner as to convey intelligences to the brain of the exact status of every part, pain, pleasure, joy or sorrow, rejoicing or grief, health or disease. This is the most marvelous phenomenon imaginable. While it is supposed to be situated in what is called the cervical ganglia, experience has partially demonstrated, at least, that such an influence may be produced or achieved all along the spinal column, clear down to the last ganglia, at the lower end of the coccyx. Recognizing the all-important fact in this system, a complete supervision of the nervous system by this system called the sympathetic, and understanding that the filaments of this set of nerves begin in the calvarium and end everywhere in and on the surface of the body, controlling all action, motion and sensation, we can readily understand in a measure how we effect motion through these filaments (for we do not reach nerve centers directly in our manipulations). At the base of the brain, on the posterior aspect of the upper portion of the cervical region, there are collected together a greater number of sympathetic nerve filaments than in any other locality reachable with the hand or fingers, hence this becomes our vulnerable point, and here we start impressions that seem to control motor influences in every other; and, having learned this, we utilize this salient locality, and begin our treatments here. This division of the spinal nerve is recognized as the Vaso-Motor Nerve Center. It embraces four vertebral spaces—from the base of the skull to the lower margin of the fourth cervical vertebra. **The next important division, beginning at the fourth cervical vertebra, and embracing all that part of the cervical region as far down as and**



PLATE XXIV.—The Method of Treating the Saphenous Vein.



including the first dorsal, is what is commonly recognized as the Brachial Plexus. From this point down the dorsal region, including the twelfth dorsal vertebra, we have the Dorsal Plexus. Continuing from the lower margin of the twelfth along down the column to the upper end of the sacrum is embraced what is termed the Lumbar Plexus. The Sacral Plexus, of course, embraces the whole length of the sacrum to the coccyx. The Coccygeal Plexus, situated on the inside of the coccyx, is called the ganglion of impar. The importance of these divisions will appear in due time, later on.

CONSIDERATIONS EXTRAORDINARY.

The division of the nervous system, especially the spinal, into groups of plexuses, only serves the purpose of locality of distribution, assumed origin and effect of a stimulation in this or that particular locality somewhere else, or at some particular exit of a spinal nerve, or the particular cluster of sympathetic or other filaments. The main consideration that we desire to emphasize above all others is the control exercised by the sympathetic nervous system, whose filaments terminate everywhere in the system, and that influences are exerted at the ends of these nerves, and that these are executed through the motor nervous system and the sensory nervous system. The motor nervous system executes, as it were, the orders of the sympathetic; and the sensory nervous system feels impressions, and these impressions are conveyed to the headquarters through the sympathetic nervous system. Recognizing these principles, we are guided in our conclusions in reference to the condition or conditions of various parts of the body. There are no sensations without impression—pressure or contact at the ends of nerves. Knowing the origin, course and ending of a nerve, and knowing the office of a nerve, our diagnosis of conditions in the parts supplied thereby becomes clear to our vision. The nerves penetrating through muscles have no influence on that muscle, but the influence is exer-

cised by the nerves ending in the muscle. Understanding this fact, our diagnosis should be clear as to the nerves involved in a given pathological condition. And as the nervous system controls the circulation of the fluids, it may be seen that, should interference in the normal action or office of the nerves distributed to certain localities be made, the results could be fairly calculated. If, for instance, cold should contract muscular fibers through which a trunk or bundle of nerve fibers passed, impinging upon it so as to interrupt its normal action, the influence would be felt at the end of its distribution, and if a motor nerve, motion in the part to which it was distributed to a greater or less extent would be disturbed. If a sensory nerve, sensation would share a like effect; and if a sympathetic, there would be impairment of the function of both motor and sensory, for all action, as well as all sensation, is under the control of the sympathetic. If the communication at the ends of the nerves is cut off, failure of the execution of function ensues. To regard the nervous system in any other light, confusion involves our every effort to treat pathological conditions. For instance, suppose we recognize any nerve passing out of the spinal cord as one nerve, then, after it penetrates the muscular tissue a short distance, it divides, one branch terminating in one muscle and another in some other muscle (instance, the Anterior Thoracic). Would it not seem that the same origin is the common sense view to entertain? Our anatomists tell us that one branch arises from the outer cord and another from the inner cord. Suppose, now, that pain is found in the pectoralis major, our manipulations would be directed to the pressure on the branch that supplies the pectoralis muscle. There would be no use or propriety in our treatment of the branch that comes from a different locality, and that supplies another muscle. There is such a world of confusion in the knowledge of the distribution of the nerves, the branch idea, and the supply of tissue through which nerves pass, that no correct conclusion is arrived at as to pathological conditions, under-



PLATE XXV.—The Manipulation of the Adductors.

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standing of causes, or manner of treatment required. When it is understood that every filament, wherever distributed, has its origin in the brain, goes to a certain place, exercises a particular function, and that at the end of that nerve; and that every other nerve does the same thing, being distinct in identity, whether emerging through one foramen with a thousand or a million of other nerves, every one representing a distinct appointment, and filling a place in the animal economy, and there ends—the influence of pressure may be better understood. The nerves that supply one muscle do not supply another—never. If the reader gets this idea into the mind, Osteopathy will have some meaning to it. Otherwise it will present the same jargon to his mind as the medicine theories do. We recognize the fact that nerves originating in the corium may end anywhere along the line of the course pursued, whether it be the side of an artery or in the tissue at the remotest point of the body under or in the skin of the hallux.

There are, it will be understood, twelve places of origin in the brain for nerves, and each and every fiber has its distinct origin and ending—with no branches. We do not regard the nervous system as having branches, nor originating in ganglia, nor anastomosing. Everything in and controlling the physical organism has mind to superintend its every part, and that mind acts in harmony with itself in all other things, and until it is demonstrated that something else than nerves conveys through them the intelligence of a Divine Mind, I shall insist upon the truth of the statement made regarding the origin and distribution of the conductors of this intelligence. Take, for instance, the renal splanchnic nerve: Stimulation of sympathetic nerve filaments, reached at the twelfth dorsal vertebra, increased action of the kidneys ensues. Take the lower lumbar nerves: Stimulation of them upward lessens the irritability of the neck of the bladder. Special nerves control certain tissue, and certain individual localities. Certain filaments of the pneumogastric nerves control certain results

or generate certain secretions in the walls of the stomach, and certain others oversee the elimination of that secretion at particular suggestions or impulses—and so it is everywhere in the system. If this were not the case, pray tell how all of the elements are so perfectly manufactured in all of the glandular systems, and certain chemical constituents are removed from the blood in certain organs and certain others in other glands? In the salivary glands we have alkaline secretions formed, in the liver we have an alkaline, but in the stomach wall we have an acid secretion. These things do not happen. It is an every-moment occurrence from youth to old age.

It should be no trouble for the reader now to comprehend the philosophy of the cause of disease. Recognizing the fact that influences of intelligence are cut off anywhere along the line from beginning to terminus, being the only channel of communication, is it not plain that action beyond the cut-off is nil? The contraction of muscular fiber, direct pressure from without, or an immediate or gradual accumulation of blood or other fluids around the nerve or at the terminal, interferes with the function of the said nerve, and if a bundle of them in the same way, the effect is the same. And now, as it is the province of the sympathetic nervous system to control selection, assimilation, etc., and as this system controls circulation in the capillaries, as the blood passes through these tubes, there is the proper amount of and number of the elements drawn therefrom to supply the demand at that particular place so as to build up waste or worn-out tissue, and at the same time direct the elimination of the material that has served its purpose in the physical economy, through the lymphatic tubes into the venules or veins beyond the capillaries, thence to be conveyed back to the heart, and from there to the lungs for renovation. This constant round goes on in every part of the body all the time, in a normal condition. This is what we mean by a physiological condition—when there is no obstruction anywhere, undue pressure, contracture of muscular fiber or paralysis of nerve centers so as to arrest nerve

action. The philosophy involved in the circulatory apparatus, the nervous system that controls it, its anatomy and its physiology, make it easy to comprehend how pathological conditions are changed by manipulations, and the necessity of understanding what normal action is, so as to be able to correct abnormal conditions when they occur.

It is a notorious fact that somehow, through nerve influence, there are maintained in the system two antagonizing elements—the Positive and the Negative—and that these are generated in certain parts of the system for special and distinct purposes, and that when the union of these poles takes place, the current established, neutrality occurs, and the excess of the acid or the alkali so changed as to reinstate normal action in the parts disturbed or exercised thereby. Whether the scientific world has observed such a condition in the system or not, we have not seen an account of it, but that it is so our observations in numerous instances have abundantly demonstrated. We have an example in point in the pathological condition called colic. The excessive acid in the stomach contracts the muscular fibers so as to compress the sensitive nerves in the stomach walls, hence pain. This excessive acidity is due to incoordination of the pneumogastric nervous system and the splanchnic nervous system, one generating acid and the other alkaline secretions. Proper pressure—stimulation of the sympathetic filaments on the sides of the spinous processes over the splanchnics—corrects the acidity. Colic is instantaneously relieved by the proper manipulation in the splanchnic region.

THE ORDER OF THE SPINAL NERVES.

The First Cervical supplies the rectus lateralis, rectus capitis, anticus, posticus, sterno-hyoid, sterno-thyroid.

The Second and Third Cervicals supply the sterno-mastoid, trapezius, scaleni and neck, omo-hyoid and diaphragm. The sensations at the back of neck to vertex, occipitalis major,



PLATE XXVI.—Treating Fibula and Leg Muscles.





intrinsic hand muscles, thenar and hypothenar muscles, and the sensations are chiefly on the inner side of forearm to near the axilla, through the internal cutaneous, and lesser internal cutaneous or nerve of Wrisberg.

The Second Dorsal sends sensations to inner side of arm, near and in axilla, through the intercosto-humeral.

The Second to Twelfth Dorsal supplies muscles of the back and abdomen, erector spinae. The Fourth to Seventh Dorsal supplies the epigastric region, and from the seventh to the eleventh the abdominal region. There are vasomotor centers from the second dorsal to the second lumbar region. The skin of the chest and abdomen, in bands, running around and downward, correspond to spinal nerves. The upper gluteal region is supplied by the intercostals and dorsal posterior nerves—with sensations.

The First Lumbar nerve goes to the cremasteric, with third lumbar supplying the inner side of the thighs, and the Second Lumbar supplies the vastus internus muscle, and with the first, through the ilio-hypogastric and ilio-inguinal, supplies the skin over the groin, and the second supplies the outer, upper and front of the thigh, through the genito-crural and external cutaneous.

The Third Lumbar and the Fourth supply the sartorius flexors of the thigh, extensors of the knee, and abductors of the thigh, and through the gluteal send sensations to the front and side of the thigh (outside), and inner side of the foot and leg through the internal cutaneous and long saphenous and obturator.

The Fifth Lumbar supplies the outward rotators, flexors of knee and ankle, peronei muscles and extensors of the toes, and through the external popliteal, external saphenous, musculo-cutaneous and plantar exerts an influence in these parts.

The First and Second Sacral supply the calf muscles, glutei, peronei, extensors of the ankle and small muscles of the foot; reflexes to the plantar region come from the fifth lumbar, and second sacral reflex influences to the back of

buttock, side of leg and ankle, sole of the foot and dorsum of foot.

The Third, Fourth and Fifth Sacral send filaments to the perineal, muscles of the bladder, rectum and external genital, and are supposed to be the genital center, vesical center and anal center, sending to these parts the small sciatic, pudic, inferior hemorrhoidal and inferior pudendal.

The above is all that the anatomies and physiologists teach on this important system, so far as reflexes are concerned, and origin of the nervous system that controls and regulates sensation and reflexion.

The Osteopathic practice includes all these, but has advanced greatly in regard to the controlling influence the nervous system exerts, and does not regard simply the reflexes so much as the controlling influences of the sympathetic nervous system, in superintending and directing repair and waste, and its supreme control over every tissue in our body. What therapeutical benefit are the sensations in the cure of disease? The thing to do is to remove abnormal obstructions and permit normal and uninterrupted action throughout every department, and regard reflexes as simply the influences brought about as suggestions and declarations of the sensory nervous system as to its impingements, etc., in the great economy of nerve influence. Our interest as Osteopaths depends solely upon the knowledge of the sympathetic nerves.

CERVICAL AND DORSAL NERVES.

The first cervical nerve and the second cervical ganglion embrace the spinal, cervical plexus, hypoglossus, and the glosso-pharyngeal.

Between the second and the third cervical vertebrae we have the anastomosis (apparent) of the superior cervical ganglia, with first cervical pair.

Between the second and third cervical vertebrae we have the superior cervical ganglia, connecting with the third, the



PLATE XXVII.—Stretching Muscles of Back of Leg.



pharyngeal and carotid filaments (branches) of the superior cervical ganglion, pharyngeal and inter-carotid plexus.

At the second, embracing the second, third and fourth to the fifth, we have the vaso-motor ganglia, which control the circulation.

At the third cervical begin the phrenic ganglia, embracing the fourth and fifth cervical; and between the third and fourth we have the pharyngeal and inter-carotid plexus and the laryngeal branches, the right pneumogastric and the vagus.

At the fourth cervical we have the phrenic, the superior cardiac nerves, cervical plexus, and communicating fibers (branches) to the superior and middle cervical ganglia. A communicating branch or filament from the fourth cervical unites (apparently in the same sheath) with the fifth to begin the brachial plexus. A set of nerves from the fourth connects the cervical with the brachial, and it is supposed that the vaso-motor takes in the cervical from the second to the seventh.

Between the fifth and sixth cervical we have the cardiac plexus. Between the sixth and seventh we have the inferior cervical ganglia, embracing the sixth and seventh.

At the first dorsal we have the center for the lungs—the thoracic ganglia of the sympathetic nerves.

At the second dorsal we have the cardiac plexus and the nerve center for the ciliary plexus of nerves that control the ciliary muscles.

At the fourth, the ganglia that control the pyloric end of the stomach—and some intercostal nerves and vessels.

Between the fifth and sixth we have the pulmonary veins and the vaso-motor to the arm.

At the fourth and fifth dorsal vertebrae we have the center of abdominal brain (going to it).

The center that controls heat, chills, etc., is at the eighth dorsal, taking in the seventh, eighth and ninth dorsal for chills.

Between the eighth and ninth, the œsophagus, right pneumogastric and vagus nerves.

At the ninth dorsal we control fever. Between the ninth and tenth we control the blood supply to the ovaries.

At the tenth dorsal we treat for pain in ovaries.

At the eleventh and twelfth dorsals we have the renal splanchnics, and treat there for the diaphragm, the kidneys, liver, diarrhea and flux. For these affections treat up from the sacro-lumbar junction. Also for nocturnal enuresis and hydrosis.

At first lumbar we have the renal plexus. At the second the spermatic plexus. From the second lumbar to the fourth lumbar we have the pelvic plexus, and at the second the par-turient plexus. At the fourth we have the defecation ganglia, that control the action of the lower bowels. The center of the pelvic brain is at the fifth lumbar. At the fourth is the superior aortic plexus.

The fifth is the hypogastric plexus, and controls the vena cava inferior.

The third sacral controls the sphincter of the bladder (?).

The fourth sacral, the vagina, relaxing it.

The fifth sacral controls the levator ani muscle and external sphincter muscle.

The above is what they teach at the American School of Osteopathy.

On the following pages we reproduce diagrams and classifications of the nervous system, as outlined by S. O. L. Potter, M.D.

THE SPINAL NERVES, 31 PAIRS.

8 CERVICAL, 12 DORSAL, 5 LUMBAR, 5 SACRAL, 1 COCCYGEAL.

N. B.—Read from the Black Type outwards to left and right.

to muscles and { *Ext. Br.* } Post. DIV. { Each } Ant. DIVISION, to
 skin of back. { *Int. Br.* } { Spinal Nerve } divides into { } Plexuses, etc.

Post. Div. of 2d N. }
 Post. M. of head, etc. } Post. { 1st Cervical } Ant. { *Brs. (8) to Recti cap. Muscles.*
 Complexus Muscle. } DIV. { Nerve. } DIV. { Commun'g } { 2d Cerv. N.
 Skin of occiput. } { *Sub-occipital* } { } { *Brs. to* } { Hypogl. N.
 { } { } { } { *Sup. Cerv. Gang.*
 { } { } { } { *Br. to Occip-atloid artic'n.*

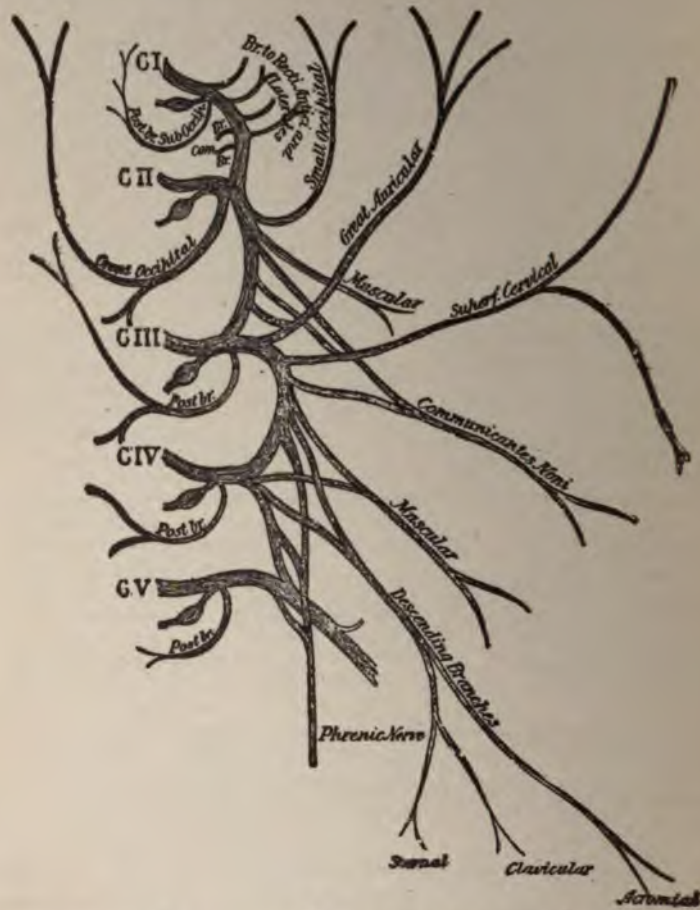
Splenius. }
 Cerv. ascendens. } *Ext. Branch* { } Post. { 2d } Ant. { *Fil. to Sterno-mast. M.*
 Transv.-coll. } supplying } DIV. { Cervical } DIV. { *Asc. Br. to 1st Cerv. N.*
 Trach-mastoid. } } { Nerve. } { } { *Desc. Br. to 3d Cerv. N.*
 Complexus. } } { } { } { *Fil. to Commun. Noni N.*
 to 1st Cerv. N. } *Int. Br. or* { } { } { *Occipitalis Minor Nerve.*
 Skin of occiput. } *great Occip.* { } { } { }
 Auricular. } { } { } { } { }

Splenius. }
 Cerv. ascend. } *Ext. Br.* { } Post. { 3d } Ant. { *Auric. Magnus.*
 Trans. coll. } supplies } DIV. { Cervical } DIV. { *Superf. Cervical.*
 Trach-mast. } } { Nerve. } { } { *Ascen. Br. to 2d Cerv. N.*
 Integument } *Int. Br.* { } { } { *Br. to Spinal-ac.*
 of occiput. } to supply { } { } { } { *Fil. to 4th Nerve.*
 { } { } { } { } { *Fil. to Lev. ang. scap.*
 { } { } { } { } { *Supra-clavicular.*
 { } { } { } { } { *Fil. to Com. Noni N.*
 { } { } { } { } { *Fil. to Phrenic N.*

Muscles of the back. { Post. { 4th Cervical } Ant. { *Fil. to 3d Cerv. Nerve.*
 { DIV. { Nerve. } DIV. { *Fil. to 5th Cerv. N.*
 { } { } { } { *Fil. to Phrenic N.*
 { } { } { } { *Fil. to Scalenus medius.*
 { } { } { } { *Fil. to Supra-elavic. N.*

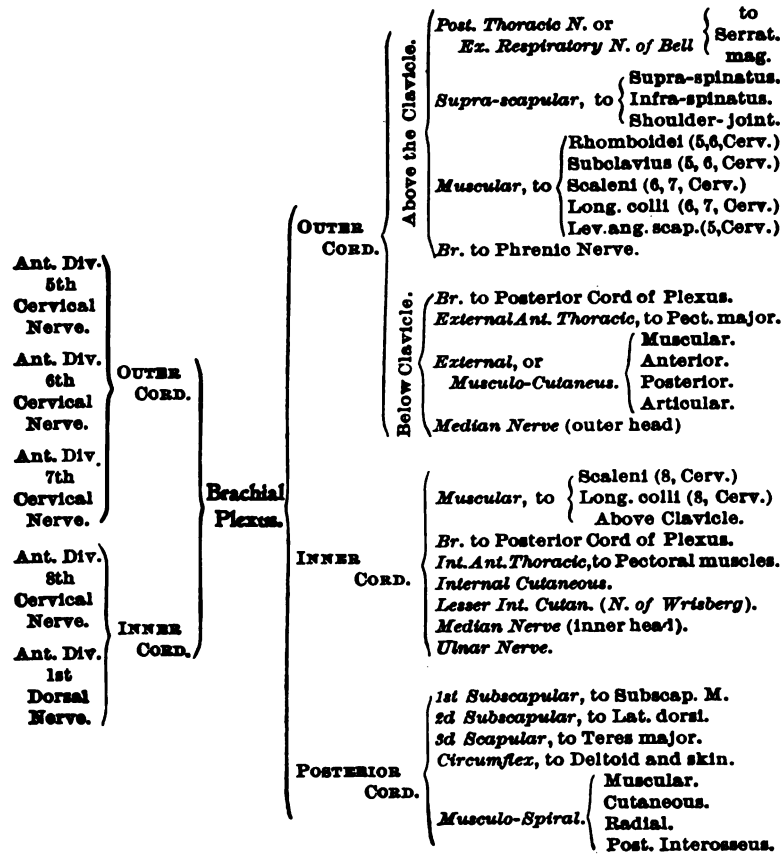
Anterior }
Branches } *Superficial Br.* { *Ascending Set (5) to head and shoulder.*
 of } { *Descending Set (8) Sternal, Clavic. Acrom.*
 1st Cerv. N. } { } { } { } { } { *Communi-* { *Vagus.*
 2d Cerv. N. } *Cervical* { } { } { } { } { *cating to* { *Hypogl.*
 3d Cerv. N. } *Plexus.* { } { } { } { } { } { *Symp.*
 4th Cerv. N. } { } { } { } { } { } { } { } { *Muscular.*
 { } { } { } { } { } { } { } { *COMMUNIO. NONI NERVE.*
 { } { } { } { } { } { } { } { *PHRENIC NERVE.*
 { } { } { } { } { } { } { } { *Muscular (4).*
 { } { } { } { } { } { } { } { *Comm'g to Spinal-acc. N.*

THE SPINAL NERVES.
Cervical Plexus.



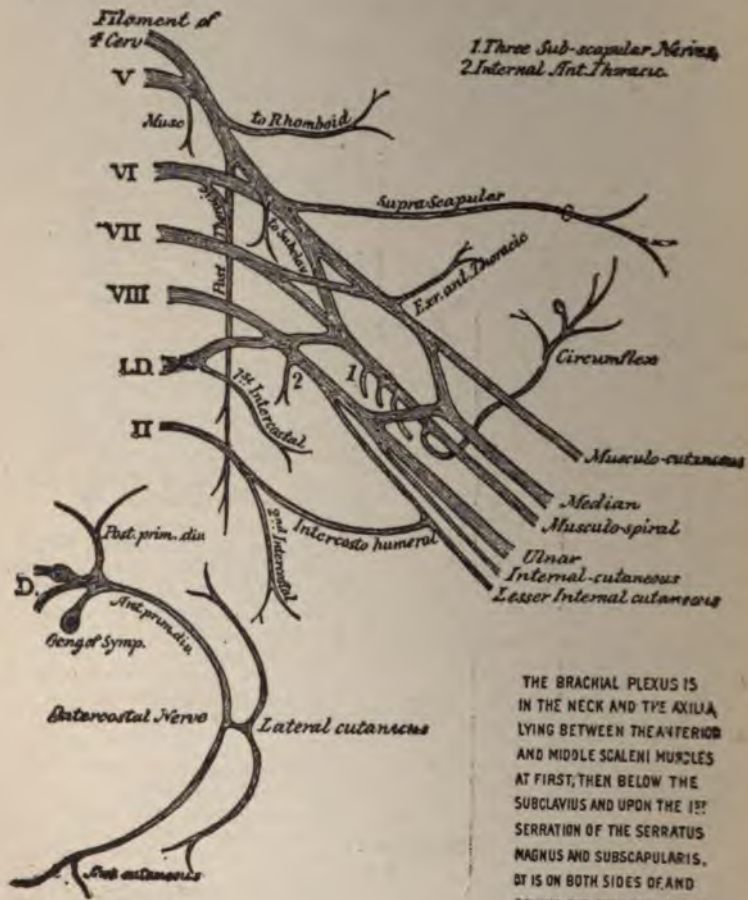
THE PLEXUS { LIES UPON THE (SCALENUS MEDIUS AND) MUSCLES.
THE CERVICAL { IS COVERED BY THE STERNO-CLEIDO-MASTOID MUSCLE.

THE BRACHIAL PLEXUS.



THE SPINAL NERVES

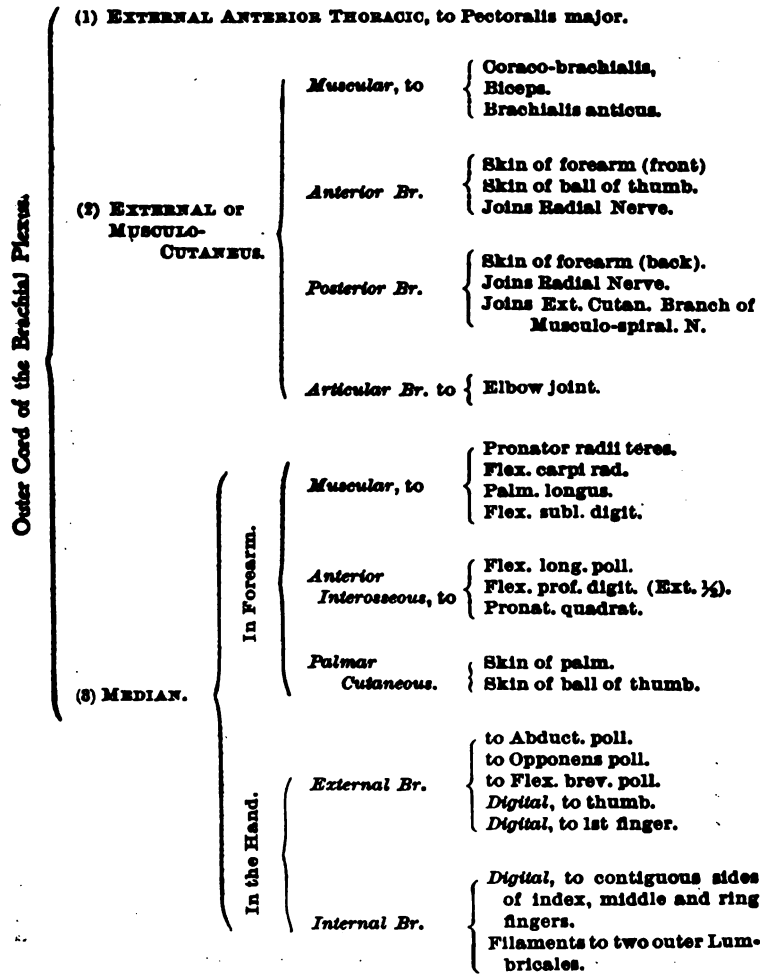
Brachial Plexus



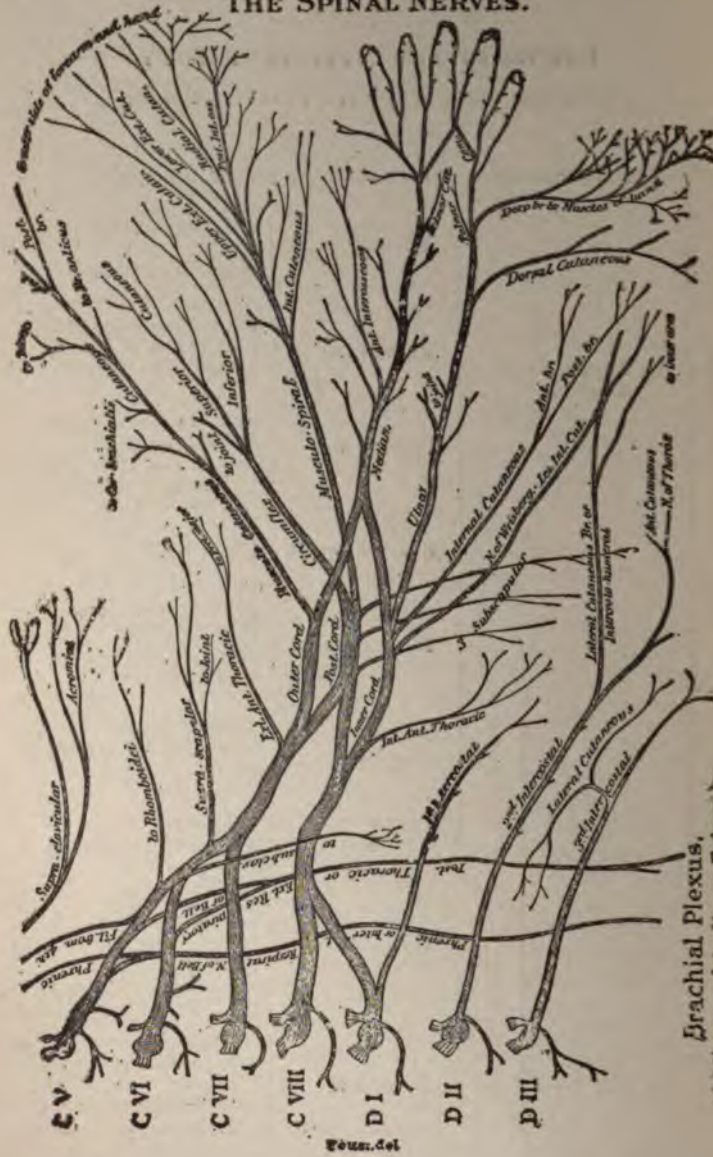
THE BRACHIAL PLEXUS IS IN THE NECK AND THE AXILLA, LYING BETWEEN THE ANTERIOR AND MIDDLE SCALENI MUSCLES AT FIRST, THEN BELOW THE SUBCLAVIUS AND UPON THE 1ST SERRATION OF THE SERRATUS MAGNUS AND SUBSCAPULARIS. IT IS ON BOTH SIDES OF AND BEHIND THE AXILLARY ARTERY IN ITS 2^d PORTION, EXTERNAL TO IT IN ITS 1st PORTION.

NERVES OF THE UPPER EXTREMITY.

TERMINAL BRANCHES OF THE BRACHIAL PLEXUS.



THE SPINAL NERVES.



Brachial Plexus,
and Nerves of the U, 2, 3 Extremity.

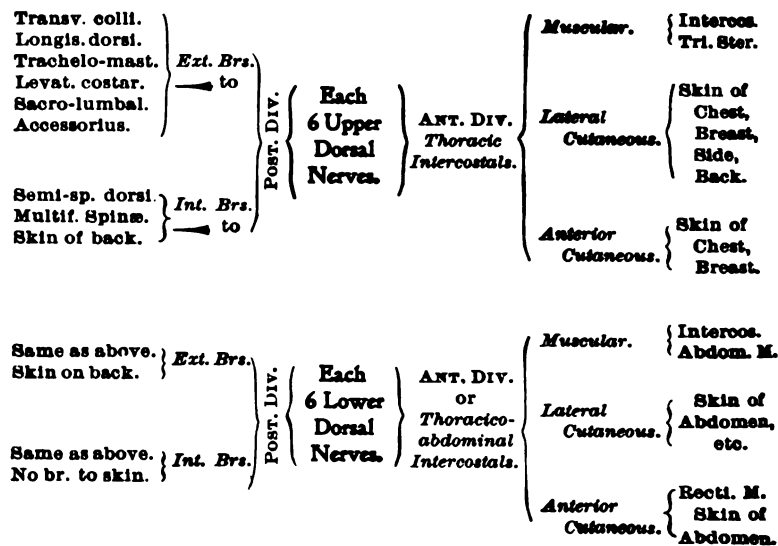


- Inner Cord of the Brachial Plexus.
- (4) INTERNAL ANTERIOR THORACIC, to both Pectoral muscles.
 - (5) INTERNAL CUTANEOUS. { *Anterior Br.* to skin of forearm, inner side.
 Posterior Br. to skin of forearm, inner side.
 - (6) LESSER INTERNAL CUTANEOUS. { *(N. of Wrisberg.)* Is often wanting, Intercosto-humeral taking its place, to posterior surface of lower third of skin of arm.
 - (7) ULNAR. {
 - In Forearm. {
 - Articular,* to Elbow-joint.
 - Muscular,* to { *Flex. carp. ulnaris.*
 Flex. prof. dig. (inner half).
 - Palmar Cutaneous.* { Skin of front of wrist and palm of hand.
 - Dorsal Cutaneous.* { Skin of back of wrist and one and a half fingers.
 - In Hand. {
 - Articular,* to Wrist-joint.
 - Superficial Brs. to* { *Palmaris brevis.*
 Skin of one and a half fingers.
 - Deep Brs.* to { *Muscles of little finger.*
 Interossei.
 2 *inner Lumbricales.*
 Adduc. pollicis.
 Flex. brev. poll. (inner head).

- Posterior Cord of the Brachial Plexus.
- (8) SUBSCAPULAR. . . { *1st Upper,* to Subscapular muscle.
 2d Long, to *Latiss. dorsi.*
 3d Lower, to *Teres major.*
 - (9) CIRCUMFLEX. . . {
 - Superior Br. to* { *Deltoid.*
 Skin of shoulder.
 - Inferior Br. to* { *Teres minor.*
 Deltoid (post.).
 Skin of shoulder.
 - (10) MUSCULO-SPIRAL. . . {
 - Muscular, . . . to* { *Triceps, Anconeus.*
 Brach. anticus.
 Supin. long.
 Ext. carpi. rad. long.
 - Cutaneous, . . to* Skin of arm.
 - RADIAL. { *External Br. to* Skin of thumb.
 Internal Br. to { Skin of three and a half fingers on radial side of dorsum.
 - POSTERIOR INTEROSSEOUS. { to all muscles on back of forearm, except *Anconeus, Sup. long. and Ext. carpi. radialis long.*
 Filaments to wrist-joints.

THE DORSAL NERVES.

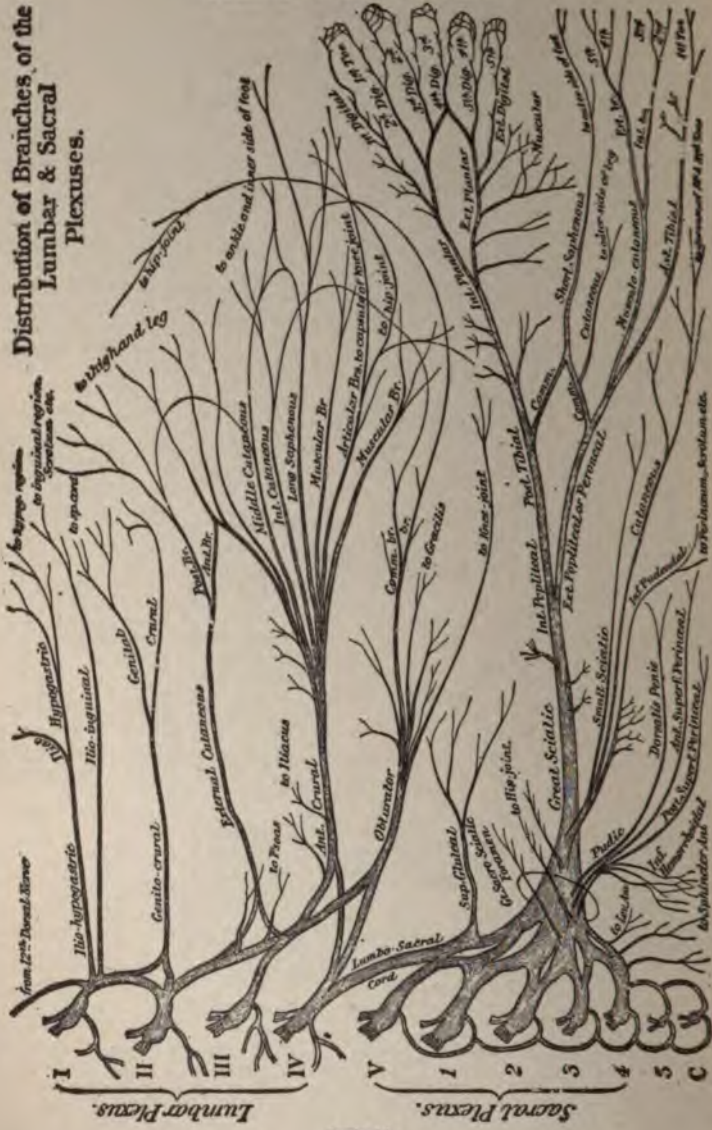
N. B.—Read from the Black Types outwards to left and right.



THE LUMBAR AND SACRAL NERVES.

<p><i>An External Branch</i> sending filaments to the Erector spine and Intertransversales muscles, and the skin of the gluteal region, posteriorly.</p>	<p>The Posterior Division of each of these Nerves has</p>	1st Lumbar.	{ Ant. Div. { Nos. 1, 2, 3, Comm. Br. to 2d Lum.	<p>Lumbar Plexus { (1) <i>Ilio-hypogastric.</i> (2) <i>Ilio-inguinal.</i> (3) <i>Genito-crural.</i> (4) <i>Ext. Cutaneous.</i> (5) <i>Ant. Crural.</i> (6) <i>Obturator.</i> (7) <i>Accessory Obturator</i> (when present).</p>
		2d Lumbar.	{ Ant. Div. { Nos. 3, 4, 5, Comm. Br. to 3d Lum.	
		3d Lumbar.	{ Ant. Div. { Part of 5, 6, 7, Comm. Br. to 4th Lum.	
		4th Lumbar.	{ Ant. Div. { Part of 5, 6, 7, Lumbo-Sacral Cord to 5th Lum.	
<p><i>An Internal Branch</i>, sending filaments to the Multifid. spine, and skin over vertebrae of spinal column.</p>	<p>The Posterior Division of each of these Nerves has</p>	5th Lumbar.	{ Ant. Div. { Joins the Lumbo-Sacral Cord.	<p>Sacral Plexus { (1) <i>Super. Gluteal.</i> (2) <i>Muscular Brs.</i> (3) <i>Small Sciatic.</i> (4) <i>Great Sciatic.</i> (5) <i>Pubic.</i> (6) <i>Articular.</i></p>
		1st Sacral.	{ Ant. Div. { Joins the Lumbo-Sacral Cord and 2d Sacral.	
		2d Sacral.	{ Ant. Div. { Joins with 1st Sacral.	
		3d Sacral.	{ Ant. Div. { Joins with 2d Sacral and part of the 4th.	
<p><i>An External Branch</i>, forming loop on sacrum and great Sac-Sciat. lig. to supply skin over glutei.</p>	<p>The Posterior Division of each of these Nerves has</p>	4th Sacral.	{ Ant. Div. { Br. to Plexus, Visc. Brs. Mus. Brs., Fil. to 5th.	<p>Sacral Plexus { (1) <i>Super. Gluteal.</i> (2) <i>Muscular Brs.</i> (3) <i>Small Sciatic.</i> (4) <i>Great Sciatic.</i> (5) <i>Pubic.</i> (6) <i>Articular.</i></p>
		3d Sacral.	{ Ant. Div. { Joins with 2d Sacral and part of the 4th.	
		2d Sacral.	{ Ant. Div. { Joins with 1st Sacral.	
		1st Sacral.	{ Ant. Div. { Joins the Lumbo-Sacral Cord and 2d Sacral.	
<p><i>An External Branch</i>, to Multifidus spine and back part of coccyx (the two lower nerves).</p>	<p>The Posterior Division of each of these Nerves has</p>	5th Sacral.	{ Ant. Div. { Br. to skin of coccyx. Br. to Coccygeus M. Br. to Coccygeus Nerve.	<p>Sacral Plexus { (1) <i>Super. Gluteal.</i> (2) <i>Muscular Brs.</i> (3) <i>Small Sciatic.</i> (4) <i>Great Sciatic.</i> (5) <i>Pubic.</i> (6) <i>Articular.</i></p>
		Coccygeal.	{ Ant. Div. { A delicate filament, going to skin, over coccyx.	
<p>Are below the Multif. spine, join together in loops over back of sacrum, sending filaments to skin.</p>	<p>The Posterior Division of each of these Nerves has</p>	5th Sacral.	{ Ant. Div. { Br. to skin of coccyx. Br. to Coccygeus M. Br. to Coccygeus Nerve.	<p>Sacral Plexus { (1) <i>Super. Gluteal.</i> (2) <i>Muscular Brs.</i> (3) <i>Small Sciatic.</i> (4) <i>Great Sciatic.</i> (5) <i>Pubic.</i> (6) <i>Articular.</i></p>
		Coccygeal.	{ Ant. Div. { A delicate filament, going to skin, over coccyx.	

THE SPINAL NERVES.



DISTRIBUTION OF THE BRANCHES

FROM THE 7 GREAT TRUNKS OF THE LUMBAR PLEXUS.

- | | | |
|------------------------------|---------------------|---|
| (1) ILIO-HYPOGASTRIC | { | <i>Iliac</i> , to skin of gluteal region.
<i>Hypogastric</i> , to skin of that region. |
| (2) ILIO-INGUINAL | { | to Internal Oblique Muscle.
to skin of upper and inner thigh, scrotum, penis. |
| (3) GENITO-ORURAL | { | <i>Genital</i> , to Cremaster, scrotum, round ligament.
<i>Crural</i> , to skin of upper and front thigh. |
| (4) EXTERNAL CUTANEOUS . | { | <i>Ant. Br.</i> to skin of anterior and outer thigh, above knee.
<i>Post. Br.</i> to skin of posterior and outer thigh, above knee. |
| (5) ANTERIOR
ORURAL. | { | <i>Ant. Div.</i> { |
| | | <i>Mid. Cutaneous.</i> { |
| | | <i>Int. Cutaneous.</i> { |
| | | <i>Ext. Br.</i> to skin, lateral or knee.
<i>Post. Br.</i> to skin of inner thigh and leg. |
| | | <i>Long Saphenous.</i> { |
| | | to skin of knee and of front and inner leg and foot. |
| | <i>Post. Div.</i> { | |
| | | <i>Muscular Brs.</i> to muscles on front of thigh all but two.
<i>Articular Brs.</i> (2) to capsules of knee- and hip-joints. |
| (6) OBTURATOR . . | { | <i>Ant. Br.</i> { |
| | | <i>Articular Brs.</i> to hip-joint.
<i>Muscular Brs.</i> to Adductors, Gracilis and Pectineus.
<i>Anastomotic Brs.</i> with Inter. Cutan. and Int. Saphenous. |
| | <i>Post. Br.</i> { | |
| | | <i>Articular Brs.</i> to knee-joint.
<i>Muscular Brs.</i> to Adduc. mag. and Obturator externus. |
| (7) ACCESSORY OBTURATOR . | { | <i>Muscular Br.</i> to Pectineus.
<i>Articular Br.</i> to hip-joint.
<i>Cutaneous Br.</i> to skin of thigh and leg. |
| | | Occasionally present. |

The Lumbar Plexus lies in the substance of the Psoas muscle, in front of the transverse processes of the lumbar vertebrae.

**DISTRIBUTION OF THE BRANCHES OF THE
SACRAL PLEXUS.**

- (1) SUPERIOR GLUTEAL, . . . { *Sup. Br.* to the Gluteus medius and minimus.
Inf. Br. { to the Gluteus medius and minimus.
 to the Tensor vaginæ femoris.
- (2) MUSCULAR BRANCHES, to { Pyliformis, Obturator internus, the two Gemelli, and the Quadratus femoris muscles.
- (3) ARTICULAR BRANCHES, to the hip-joint.
- (4) SMALL SCIATIC. { *Inf. Gluteal*, . . { Gluteus maximus muscle.
 { Skin of side of penis, or vulva.
Inf. Pudendal, { Skin of upper and inner thigh, and of
 { scrotum or labium.
Cutaneous, . . { Ascending, to Skin over Gluteal.
 { Descending, to Skin of posterior thigh.
- (5) GREAT SCIATIC. { *Articular*, . . . to the hip-joint.
 { *Muscular, to* . . { Adductus magnus, Biceps.
 { Semi-membranosus, Semi-tendinosus.

EXTERNAL POPLITEAL OR PERONEAL. { Terminal Branches.
INTERNAL POPLITEAL NERVE. { (See page 190.)
- (6) PUDIC, . . . { *Perineal*, { *Superficial Perineal*, { to Skin of anus, scrotum,
 { *Muscular, to perineal muscles.* } penis and labia, and the
 { } Sphincter ani muscle.
Inferior Hemorrhoidal, { to Sphincter ani muscle.
 { to Skin of anal region.

Dorsal of Penis, . . . { Skin of dorsum of penis.
 { *Br. to Corpora cavernosa.*

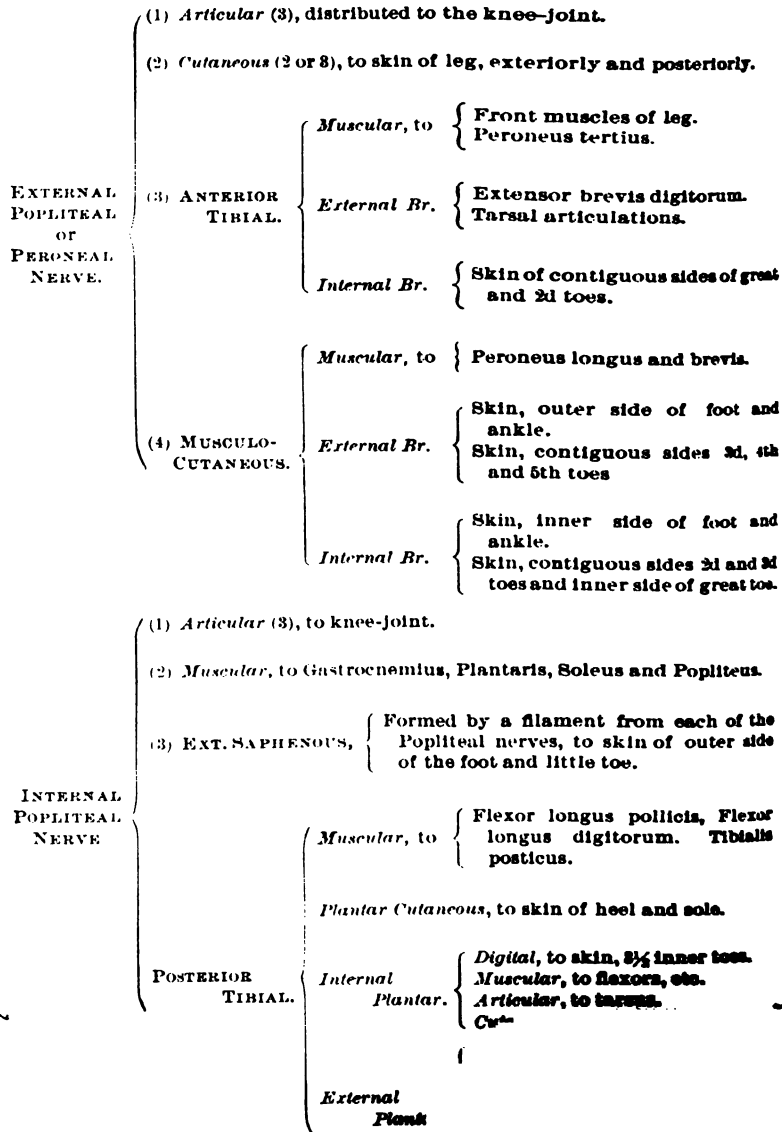
The Sacral Plexus lies in the pelvis upon the Pyliformis muscle, and is covered by the Pelvic fascia, and the Sciatic and Pudic arteries.

THE SYMPATHETIC NERVOUS SYSTEM.

		Ganglion of Ribes.	{	On the Anterior Communicating Artery. In it begins the double chain of gangliated cords enumerated below.
External Branches to join the 1st, 2d, 3d, 4th Cervical Nerves.	Superior Cervical Ganglion.	Sup. Brs.	{	Some to Pneumogastric, Glossopharyngeal and Hypoglossal Nerves.
				Ascend. Br. { Ext Br. forms Carotid Plex. Int. Br. forms Cavernous Plex. along. Int. Carotid Artery.
			{	Anterior Branches, to Plexus on Ext. Carotid Artery.
		Int. Brs.	{	Pharyngeal, to Pharyngeal Plexus. Superior Cardiac Nerve, to Cardiac Plexus, goes to Deep Pl. on right side, to Superficial Pl. on left side of body.
Ext. Brs. to 5th and 6th Cervical Nerves.	Middle Cervical Ganglion.	Int. Brs.	{	Filaments along Inf. Thyroid Art. to Thyroid body and Larynx. Mid. Cardiac Nerve, to Deep Cardiac Plexus.
Ext. Brs. to 7th and 8th Cervical Nerves.	Inferior Cervical Ganglion.	Int. Brs.	{	Filaments along Vertebral Art. to cranium. Inf. Cardiac Nerve, to Deep Cardiac Plexus.
Ext. Brs. to 12th Dorsal Nerve.	12th Thoracic Ganglia.	Int. Brs.	{	Upper 5th or 6th to Aorta and Vertebral column. 2d, 3d and 4th to Post. Pulmonary Plexus. Lower 6th from the 3d Splanchnic Nerve, thus— 6th-10th, Great Splanchnic, to Semilunar Gang. 10th-11th, Small Splanchnic, to Coeliac Plexus. 12th, Smallest Splanchnic, to Renal Plexus.
Ext. Brs. to Lumbar Nerves.	4th Lumbar Ganglia.	Int. Brs.	{	Some to Aorta Plexus. Some to Hypogastric Plexus.
Ext. Brs. to Sacral Nerves.	4th Sacral Ganglia.	Int. Brs.	{	to Pelvic Plexus. to Plexus of Middle Sacral Artery.
		Coccygeal G., or Ganglion Impar.	{	In which ends the double chain of gangliated cords enumerated above, and called The Sympathetic Nervous System.

DISTRIBUTION OF THE NERVES OF THE LEG AND FOOT.

[TERMINAL BRANCHES OF THE GREAT SCIATIC.]



GENERAL AND SPECIAL TREATMENT

GENERAL TREATMENT.

Beginning at the back of the neck, raising the neck up with the hands, fingers meeting near spinous processes on either side of vertebrae, with top of head against operator, springing neck as shown in Plate No. I., then dropping hands on either side of neck, proceed to roll head from side to side, using the fingers alternately against side of neck, moving and manipulating all of the muscles on the posterior aspect of neck up and down the sides of neck for several successive moves; then placing one hand under neck, the ends of fingers reaching across back of neck to under and posterior side of the mastoid process, the other hand gently curved around the chin, pull gently with both hands until there is a perceptible moving of the whole body upwards; then, holding taut the hands in position named, turn head toward fingers of hand under neck, pressing upward with ends of fingers on neck; still holding neck taut, turn head back to former straight position with the body, then let go both hands; change position of hands so as to turn head in other direction same way. Then holding the finger ends all in a bunch near spinous processes, against back of neck, make several vibratory moves with both hands at the same time, jerking up and down with both hands, fingers pressing on sides of neck, well back near spines, moving up and down the neck as moves are made. Then place the ends of one or two fingers in angle of jaws, direct patient to open the mouth widely, and operator pulls fingers upward behind angle of jaws tightly, and as patient closes mouth and jaws lets go. This is not painful, except fingers are held taut while the jaws are being closed, which should not be done. Then, with finger ends closed in a bunch, with pulp ends

placed on temples, vibrate rapidly all around in and on temples for several successive rapid movements, dropping thumbs on forehead at the same time and rapidly rotating over every part of the forehead. That done, drop thumbs on either side of the nose, pull them upward and outward, crossing the supraorbital notch, ending that move on the forehead above superciliary ridge; then place the thumbs at lower outer angles of nostrils on either side, pressing gently, follow angle of malar bones downward and outward two or three times, winding up that movement with vibratory movements on side of face, and on either side of nose, and finally placing thumb on one side and spread-out fingers of hand on side of nose, index finger and the end of the thumb placed deeply in inner canthus of eye, pressing on the papillae, and holding thumb and finger so as not to squeeze together hard, nor to spread apart, with a sudden downward pressure make finger and thumb ends press upon inside of canthus on lachrymal sack, so as to stimulate nerves and blood vessels. This done, place one hand on forehead of patient standing at the side of the table, with the fingers of other hand cupped slightly, ends close to spinous processes, with a pushing of head from and a pulling of fingers toward operator, letting fingers accommodate themselves to the side of neck in such a way as to apparently pull the skin, with the muscles, from their moorings, as the head is pushed in the opposite direction. Manipulate all of one side of the neck thusly, then treat other in the same way.

The clavicles deserve our next attention. They should be raised or pressed outward at every treatment, as the contraction of the various chest muscles—contraction of—draws them downward, so as to unduly press upon important vessels and nerves, prominent of which are the jugular veins, which convey the blood from head and neck to the heart. To raise clavicles and stretch muscular fibers involved is important, and to do so requires a little skill and dexterity on the part of the operator. The easiest and surest method is to



PLATE XXVIII.—Stretching Tendo Achilles.

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stand at the side of the patient, his arm lying at the side of the body, the operator taking hold of the arm at the elbow with left hand applied on under side of, and at the lower end of humerus, in such a position as to push the whole arm upwards, close to the side of patient, far enough to displace the clavicles upward enough for operator to place fingers of other hand between clavicle and first rib, and with a firm hold, presses the arm outward and upward to a right angle of the body, gently pulling on the fingers, with which hold the clavicle from body. Care should be had as to how much pressure should be used, not to overstretch the attachments at one sitting. Now the patient is to turn on either side; the operator, on side of table facing patient, well up toward and opposite shoulders, takes hold of the wrist with one hand, placing the fingers, gently curved, on the side of dorsal vertebrae (upper side of them, next to operator), then, with arm extended to the side of the head, assuming an easy position along side of the head, a simultaneous move of both arms is to be made, the sudden pressure of the pulp ends of the fingers of the hand against the back is to be made, and at the same instant the arm is to be extended, and the arm and fingers against the back are to be held taut while the extended arm is thrust or brought downwards with a sudden, rapid move over arm of operator; then, drawn back as before, and the fingers moved down the back an inch or two, repeating this move until the spine is treated as far as to tenth or twelfth dorsal. Then the other side is to be treated in like manner. Then the patient is to lie on the back, and the lower limbs manipulated in the following manner: Let the operator, standing at the side of the table, with patient on back, take hold of the leg with one hand, just below the knee, flex the leg on the thigh, place fingers against loin in such a manner as to press firmly, then press the limb toward abdomen, knee pointing toward the chin, and with an upward, outward motion of the leg and knee manage to press the body over on the ends of the fingers, which are placed on the back, as aforesaid; and continue this

move several times, bringing the fingers on the back downward an inch or two each rotary move made by the leg, coming down with the fingers about half way between the ischium and great trochanter, and then go up to same place on lumbar, and repeat the moves. This frees the muscular system in the region of the hips, and is the treatment for sciatica—one of them. The leg should be flexed upon the thigh and the thigh on the abdomen moderately two or more times, so as to stretch the muscles and increase the flow of blood, taking off the pressure from the deeper veins of the thigh. While at this part of the body, and as a continuation of the general treatment, let the operator take hold of the leg at or just below the knee, flexing it toward the abdomen, with the fingers of the other hand placed near the center of the anterior part of the thigh, one or two inches below the angle (Poupart's ligament), holding fingers moderately tight against thigh at that place; with the hand holding the knee push the whole limb upwards, gently rolling it outward, and at the same time pulling the skin and deeper structures outward (in the femoral region), opening the saphenous vein, so as to let the venous blood return to the femoral, thence to the iliac veins. Then, still holding the knee with one hand, place the half-closed fingers of the other hand near the knee, on under side, so as to pull the muscles as the hand on the knee pushes the knee the other way—toward the other leg. The muscles of the inside of the thigh may be moved from the knee to the thigh this way, and all of these muscles should be moved in this, or any other manner best suited to the circumstances and the mood of the operator and the comfort of the patient. The other limb should be treated in the same manner. Now your patient is ready to be placed upon the face, unless the liver needs attention. If so, treatment may be done while on back, as directed elsewhere. The patient lying on the stomach, or face downward, the operator may treat the back in either or all of the following ways: Getting up on the table on one knee and other foot on the table, at the side of the patient,



PLATE XXIX.—Treatment of Outside of the Thigh.

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taking hold of the ankle of opposite limb with one hand, the other hand placed on opposite side of the spinous processes, heel of hand against muscles, raise leg, gently pulling it toward the back, forming a curve, at the same time pressing against the back, beginning about the middle of the back; let each move be made complete, letting the foot down each time, and repeat this move a number of times, moving the hand down the back its width each move until all of the lumbar and sacral regions are treated. The same moves may be made with the finger and thumb embracing each side of the spinous processes, covering same territory or region of the back. This should be repeated on the other side, with other limb as well, being careful not to spring the back too strongly, so as to do harm. The springing or sudden pressure with the fingers on the sides of the spinous processes may now be made along down the spine, from the first to last dorsal and lumbar vertebrae, with sudden, springy motion with both hands, followed up by the rotary movements upward and outward, beginning at the shoulders or the sacrum, depending on results the operator desires. This will be referred to in the body of the book. This constitutes the general treatment while the patient is on the table. The various movements that are to be made while the patient is sitting up may be made at same sitting, if needed.

SPECIAL MOVES FOR SPECIFIC RESULTS.

During the general treatment, regard should be had for special ailments. Many of the various conditions or pathological conditions of various parts of the body may be remedied or treated while the patient is on the table and during the administration of the general treatment; such as the treatment for eye affections, ear and throat, lungs, heart, asthmatic, pleuritic, liver, spleen, diarrhoea, flux, womb and bowel troubles. The choice of positions is not so essential as the correct application of manipulations, the proper pressure in

the various parts of the body, the intensity or non-intensity of the treatment. These should vary according to the condition, stage of disease, susceptibility of patient to the handling the various parts of the body. These things should be largely governed by our knowledge of the condition of the patient, which is a matter of no small consequence to both patient and operator. The treatments should be varied according to circumstances. Some patients should be treated as often as every day, others three times a week, and some twice a week, others only occasionally. Many pathological conditions yield at one treatment; others require longer or shorter courses of treatment. There is a prevailing idea with some that Osteopathic treatment is so marvelous in its results that all diseases succumb thereto at once, because a few conditions are so suddenly relieved thereby. Regarding Osteopathy as a wonderful means of treating the body for the various pathological conditions that we often find in it, there should be the necessary amount of common sense used as to its applicability in any given case, just the same as in every other system of healing, and we should not lose sight of the stubborn fact "that man is born to die" some time, and that some diseases, especially some stages of some diseases, are invulnerable, yield to no sort of treatment. Our means seem the most rational of any that we know, and have a greater range of applicability than any other; and Osteopathy possesses such varied resources that it stands alone as regards versatility, positive effectuality in many instances that almost approaches the miraculous (a little short of the Divine power itself), and being natural, can justly be classed in this category—rightly understood and applied. The opposition to its use is justly attributed to a want of understanding of it on the part of the people, as well as the doctors. It, like every other measure of merit, is making its way along the lines of approval and general interest and favor wherever its benefits are known, and that it will



PLATE XXX.—Expansion of Chest by Two Persons.

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recognized in due time without the acts of public approval through legislative bodies, for the cured will tell it everywhere, and the benefits will not be "hidden under a bushel," but blazoned forth like the genial rays of the great shining orb, the sun, at noonday, gladdening the hearts of the people, sick and well, wherever known. This is no dreamy prognostication, for it is already able to walk alone, and soon to lay aside its swaddling garments and don robes more elaborate and more attractive. All it needs is to be properly understood and rightly applied, and it opens up the flood-gates of life and lets the vital fluids run in their wonted, normal channels—then life flows on as a river.

GENERAL TREATMENT NECESSARY.

There are some manipulators (Osteopaths) who regard certain moves for local affections sufficient, and hastily make these moves, and move the patient at once, having done but little, if any, good for the patient. Rest assured that when an operator does so, he is either ignorant of the conditions governing the case, or indifferent as regards the consequences of treatment, or both. In order that Osteopathy receive the approval of the people, honest, intelligent manipulators should administer it. The automaton who has only learned a few moves, relieved a few pains, is illy prepared to become a competitor or a rival of medical practitioners in any community, after the people learn the caliber of his intellectuality. The very words of such an individual indicate his ability, his knowledge of the human system, and as was said to one many centuries ago: "Out of thine own mouth will I condemn thee." Any new science must have intelligent expounders and thoroughly posted representatives, honest, upright demonstrators of the truths of the science. The extraordinary superiority of this science can be made to stand out in bold relief when properly presented by the right sort of intelligences, men or women, or both. A knowledge of the medical

sciences is not an essential prerequisite to a knowledge of this science, but the operator should have a fair knowledge of anatomy, physiology and pathology. Knowing these three divisions, including the knowledge of normal or abnormal structure, as well as the offices or functions of the various organs of the body, and being versed in Osteopathy, he or she is prepared to adjust the system to itself much better, more easily, surely, satisfactorily than has been done by other systems, including medical, massage, Swedish movement, *et al.* The reader will not be misled by our assertions into the idea that we ignore surgery or the tissue elements. Our position as regards the tissue elements may be seen elsewhere in this work. We would emphasize our estimate of the necessity of practitioners of this science being honest in understanding it, honest in applying it, and honest in stating what may reasonably be expected of its application in relieving the afflicted. Whilst our object in writing this book is to make plain and comprehensible the science, so that the ordinarily intelligent may thoroughly comprehend its philosophy, we would not be understood as willing to relegate its use wholly to that class of practitioners, for we are satisfied that the medical profession, with ordinary mechanical skill, with their general knowledge of pathology, will be the better able to utilize it to greater and much better advantage, and are further satisfied that persons about to learn this science with anatomy, physiology and pathology before mentioned, will concede our right to that opinion, and go to some school of their choice, where the other sciences are thoroughly taught, and learn them, whether they ever have occasion to use them or not. It pays to know what the other fellow knows, so as, should occasion require it, to know how to use intelligent argument. Be posted!



PLATE XXXI.—Back and Shoulder Treatment.

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SPECIAL TREATMENT.

While the illustrations in the body of this book represent almost all of the manipulations requisite for the treatment of all sorts of ailments, in that they explain how to free the circulation and to take off the pressure, yet we would add a few remarks in reference to special treatments. It will not be necessary to go through with all of the manipulations at one sitting, and the operator must exercise his or her own judgment in regard to what treatment is required in any particular pathological condition. The thorough treatment of the muscles of the neck will be required most generally in all conditions found anywhere, for here we start to free the vital fluid that is often the cause of disease in other parts of the body; for here are the beginnings of cervical influences that, if not free, are exercised in other parts of the body. Here we find the cervical ganglia, which distribute fibrillae to many important organs, and life's forces are modified very largely by the conditions found here. The brachial plexuses are found here, and the office of the nerves coming from this portion of the neck is more frequently interfered with here than at their distributed portions. The pneumogastric and phrenic nerves are reached here, as well as the spinal accessory, and here we have to do in opening the gates of important veins that, being partially or completely closed by muscular contractions, impede the return of blood to the heart, causing catarrh, headache, eye, ear, throat and nasal congestions. The directions for the treatment of the neck will be found to be important in all cases where freedom of circulation is involved, and to stimulate other parts through nerves passing through this part of the body to others, and very frequently a pain or a diseased part may be relieved by simply knowing its nerve supply and lifting the pressure from it in the cervical or brachial region.

If we could write in glittering letters of flame, so as to emphasize the motto, "Take Off the Pressure" everywhere,

the reader would understand the importance of our philosophy being carried out. This is all there is in Osteopathy, and all there is in the treatment and the cure of all curable diseases. To repeat each move to be made under the different names of disease is to presume the operator is incompetent to comprehend a direction once given. We wish it distinctly understood that we reach all parts of the physical man through the organic nervous system, and we do this by the stimulation of terminal nerve filaments. At the same time there is an influence had in the direction of adjustment of the system to itself, in cases of luxations, either from contractions of muscular fibers or direct violence. These must be looked after, and righted, whether at once or repeatedly manipulated, depending on conditions.

There will necessarily have to be frequent references to illustrations of moves, so as to make familiar the means used to accomplish certain results, and familiarize the reader or student with the various manipulations necessary to accomplish his purpose.

After freeing all of the muscles in the cervical and brachial regions, respect is to be had regarding the clavicles. They should be raised so as to take off the pressure of important blood vessels and nerves, and especially the venous system, for here all of the diseases that affect the head and throat most generally originate. All headaches, mouth, throat, chest and arm troubles, as well as heart and lungs, must be influenced by treatment here. Diseases of eyes and ears, in fact, of all above the clavicles, are caused by impediment to the return circulation of blood through the jugulars. The blood and the lymphatic fluids accumulating in the cervical region press upon the terminal filaments of the sympathetic nerves in this locality, preventing their action, their connection with the terminal footlets of the motor nervous system; action ceases, fluids accumulate, chemical changes at once set in, the pent-up poisons increase, and every evil possible ensues; whereas, if these veins had not been unduly pressed upon, and the blood



PLATE XXXII.—Manner of Expanding Diaphragm.



had been allowed to pursue its normal course undisturbed, no evil would have occurred. The very moment the pressure is removed, amelioration begins. This is the marvel of this science: simply to know how to remove the pressure does the work, if done.

We go on down the spinal column, lifting off the pressure, stimulating terminal nerve filaments, using the bones as our levers and the body as a weight, and our hands, thumbs and fingers as the fulcrums in lifting off the pressure and adjusting the system to itself, seeing to it that every bone, muscle, nerve and tendon are in proper condition and performing their natural function in the whole body. We find contracture of the chest muscles, as well as the intercostals, interfering with venous circulation, and that requires our attention, all along the dorsal region, and as they are especially concerned in the respiration, and respiration is necessary to the purification of the blood as it passes through the lungs, we must keep pressure off here, or take it off when existing here. We begin to understand the use of arms as levers to remove the pressure. Hence our instructions in regard to how to move the arms, where to hold them, when and how to manipulate them in the treatment of all diseases of the chest, embracing heart, lungs, liver, spleen, stomach and viscera.

As we descend into the lumbar region, we find important points which demand our most careful and special attention, for here, right at the junction of the twelfth dorsal and first lumbar, are fibers that, stimulated, reach the kidneys and correct many pathological conditions that other means fail to do. The second lumbar vertebral ganglia are important in that there are nerve fibers reached here that control the genital organs and the muscular tissue on the thighs and legs. Proceeding downward to the next, or third lumbar, we reach filaments that control the gluteal region, and continuing down to the fourth and fifth, we reach regions of vital importance to the patient in the treatment of diseases of the pelvic viscera, and affections of the leg muscles.

Each and every department of our body is supplied with nerve filaments that come from the brain, and we can only influence them through sympathetic filaments, so that it becomes a matter of great interest to the manipulator to regard proper starting points if good is to come of the treatment. A haphazard sort of manipulation may result in benefit, but it is better to know how to do the work intelligently, then we have the satisfaction of commanding the situation. The correct knowledge of how to make these moves we call Osteopathic manipulations becomes vitally interesting when important pathological conditions involving the life or death of the patient are considered. Much depends on the knowledge of the manipulator, and the how he does it, to produce the changes that are imminent in certain stages of some diseases favorably. Our battle ground, then, is the whole man. The freedom from the enthralldom of pressure everywhere is the work of the Osteopath. The hands, fingers and arms execute his will power in every given case, and his knowledge influences his will power correctly or incorrectly, as his understanding is of the conditions and means of relief he possesses.

The effect of manipulations depends largely on how they are done.

The hardness or softness of the muscular tissue has much to do in results, for some are affected easily, requiring light treatments, which would be injurious if more strength were applied, whereas some stand strong, vigorous treatments. Then again, due regard must be had as to time the treatments shall continue, whether for chronic or acute affections, the frequency of, nature of disease, its duration, character, whether it involve one or more organs, vessels, and how conditions of tissue involved are at the time. The demand for the exercise of good judgment is as great in this science as in others, and it is presumable that the manipulator shall have studied anatomy and physiology, and whatever else enters into a knowledge of the human system, ere he goes to work at this science as a manipulator, to be successful. Results may



PLATE XXXIII.—Showing Manner of Liver Treatment.



follow these treatments, done as recommended, and help may be necessary at once, and this would justify any one qualified to render it, but we surely would recommend careful study of the human system before a general practice of this system be entered on by any one. It is not necessary that long years of study of the sciences should precede the practice of this science, but it is essential to know this to successfully practice. This book will teach all that is discovered in Osteopathy up to this date. We are not presumptuous enough to recommend our book as a text-book, but verily believe that in it will be found all that is known of the science in its application to all diseases.

VARIOUS MOVEMENTS IN DIFFERENT PATHOLOGICAL CONDITIONS.

The many manipulations described and shown in plates might be greatly multiplied, but these serve to elucidate the principal ones necessary to the successful treatment of almost every pathological condition known.

The practical common sense of the operator in the application of the manipulations to the end desired, or object to be attained, is an anticipated desideratum that is as essential as the various moves are in the removal of obstructions needed in the treatment of patients diseased with any and all sorts of ailments, and in the different parts of the body.

There are many similar conditions in many named pathological states that should receive similar treatment, and the reader of these pages will often wonder why one or more plates are referred to for treating diseases differently named. This will appear quite plausible when it is considered that obstructions to the circulation cause very different results. It would take volumes to explain why this is so with all of the various pathological conditions with which humanity is afflicted. To make it plain, we would offer the following explanation, which will be sufficient to elucidate the matter

of similar manipulations for different diseases. Sore throat and diphtheria—these are supposed to be different pathological conditions, both involving the same region (the throat), and yet the same throat treatment is used in the one as in the other, varying only in time, pressure used, and vessels to be manipulated, which to the observer seems to be the same treatment. Scarlet fever and erysipelas are other examples seemingly treated alike, resulting differently, because the pathological conditions vary, yet the very same blood vessels are involved in one as in the other. Our treatment is not the treatment of the *name* of a disease, but the *condition* of the part affected.

The Osteopath regards disease as the result of obstruction, and the obstruction removed, removes the cause, whatever the name of the pathological condition may be. Treat John as you would James, if both have the same condition, regardless of their names. The treatment may embrace more of the system in the one case than the other, because other organs may be involved, requiring different manipulations. Obstructions anywhere in the system produce effects according to structure involved, and due regard must be had to this matter, or the Osteopath runs into the same state as most other practitioners do—that of a "Routinist." Each and every move made starts forces that are effectual for good or ill, depending largely on locality, structures involved, etc. The Osteopath has learned when, where and how to apply these forces to produce such marvelous effects as are often the result of his "magic touch," as is at times ascribed to him. There are vulnerable points in our systems, which, if attacked or properly influenced, make us ecstatic or lull us to sleep, produce pain or relief.



PLATE XXXIV.—Manipulation of Bowels for Constipation.



TABLE FOR CONVENIENT TREATMENT.

The table should be solid, heavy enough to hold any weight desirable, made of good, sound timber. It should be thirty inches high at one end, twenty-six at the other, twenty-six to thirty inches wide, and covered with a good three-inch mattress, or upholstered, with an elevated pillow-like prominence at the highest end, for the head of the patient to rest on while being treated. All this should be covered with good oil-cloth or pantasot. Oil-cloth is more satisfactory, as it is easier kept clean and does not mark so easily. The table may be level—twenty-six inches high—provided with a hinge joint about two feet at one end, and provided with a ratchet half-circular (notched brass casting), so as to raise the head to any elevation desirable. (This will cost a couple of dollars more, but it is convenient for use in every way.) As it is necessary in the treatment of some chronic cases to get up on the table, it is proper to have a good, strong, wide table, and we would advise one that is substantial.

SPECIAL INSTRUCTIONS AS TO MANIPULATIONS.

It is said that "there is no excellence without great labor," and that if anything is "worth doing, it is worth well doing," and it is most emphatically so in Osteopathy. The manipulator should be thorough in every treatment for every affection, for the manipulations have to do in starting forces that change the conditions radically in the parts manipulated as well as in the parts to which the nerves are distributed. In nearly all treatments we start to treat the cervical region, for this locality is the nearest the starting point of all of the forces in the body, and here the gateway to every other department in the physical economy opens, and here we have more to do in controlling nerve force, regulating the circula-



tion of the fluids of the body, and removing obstructions that interfere with the return circulation from the brain to the heart. The manipulation of all of the muscles of the neck should be thoroughly done, beginning lightly, and gradually stirring up and moving not only the superficial, but all of the deeper structure on all sides of the neck until all are rendered normal, as nearly as may be at one sitting. This done, properly, the vaso-motor nerves as well in the upper and posterior portion of the cervical region properly stimulated, and the neck and spine stretched and neck adjusted in the act of stretching, and then the clavicles raised, the congestion begins at once to give way, and the life-forces start up, and already the patient begins to improve. It is not necessary to be rash in any of these manipulations, but persistence and patience, with carefulness, bring about results that are almost universally satisfactory. All of the various throat affections yield to this sort of treatment without fail, if properly done, and pent-up fluids that are producing pressure that prevents the nervous system from performing normal functions, pass on through normal channels; the pain, redness and swelling cease and relief is at once secured; whereas, medicating for such conditions fails to give relief, from the fact that relief comes from taking off the pressure. Whatever condition of an abnormal character is found to exist in this region, relief may come readily by the careful, thorough manipulations, as directed for this part of the body.

The whole cause of disease in every part of the body being *obstructed circulation*, the treatment rationally resolves itself into *a restoration of the circulation to a normal condition*. Results can not but be satisfactory when this is done. The trouble is, the people have been so used to depending on medication that they *can't see* any other way. It makes no difference how many failures they have seen or experienced, *no other way seems* them, and they are so prejudiced against using me; t from they have been accustomed to, the ier l consequences



PLATE XXXV.—Showing the Percussion of Bowels.



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than resort to means that compromise their prejudices, or turn them from beaten paths, however glowing the promise of better results. Prejudice will be overcome in time to convince some that now live of the truths of the philosophy we now teach.

DISLOCATION OF BONE—CAUSE OF.

There is a great deal said about dislocations of the bones of the human system, and a passing by that subject in this book would be considered osteopathically non-professional and unfair, therefore I would most respectfully call attention to the subject and endeavor to explain what Osteopaths (who know Osteopathy) mean by "dislocation of a bone." When it is considered that all muscular fiber is elastic, to a greater or less extent, and that the bones are held in place by ligamentous structure, and that muscles are generally attached to the ligamentous structure (and that to the bone or bones), it will be readily understood that the contraction of the muscular fibers renders taut the ligamentous structure; and in case a particular portion of the muscular fiber attached to the side or the end of a small bone, a rib or a flimsy joint, or even one of the strong muscles, contracting, draw a large joint out of, or partly out of place, and the end of the bone press unduly on a nerve or blood vessel, the results may be imagined—pain, paralysis, or pressure on a vein, artery or a lymphatic, or numerous fibers of either, the morbid results may be easily conjectured. This condition is often seen when the facts become apparent to the physician that such a state of affairs is possible. But the profession are wont to ridicule the idea of a dislocation of a bone, unless it is clear out on the side of the body or lifted entirely from its fellow, and becomes prominently apparent to even a distant observer! The prejudiced do not see anything only in their "own way." We respect-

fully ask a careful consideration of this subject, without favor or affection. Let facts be the ruling element in this discussion and results will be satisfactory. Those who assert that dislocations can not occur gradually, will please account for spinal curvature on any other principle. That a gradual shrinking of muscular fiber causes most all spinal curvatures, the observations of experts demonstrate to be true. If a back bone can be drawn sidewise, why can not a delicate, fibrous, surface articulation (as, for instance, a rib) undergo that sort of a transformation? These are so palpable that no one need be misled in the matter. Every bone in the body may be distorted, and its normal relationship distorted. This being the case, there is truth in the assertion that "A partial or complete dislocation of a bone or muscle is largely responsible for many of the pathological conditions that flesh is heir to," and "becomes a prominent factor in their production." It will yet be acknowledged that muscular contracture is largely responsible for the numerous interferences of circulation of blood and other fluids of the body, and the large majority of the pains that humanity endures. We feel assured that right here is the starting point of pathological conditions that demand our most serious and careful consideration. It not infrequently happens in the experience of Osteopathic practice that simply on the adjustment of a rib, and that, too, of one that has escaped the notice of eminent surgeons, by a slight movement, all pain at once ceases. This is most strikingly seen in functional affections of the heart, in the raising of the clavicle, stopping the whole trouble instantaneously!

EXAMINATIONS.

When it is desirable to make a thorough examination, a state of nudity will be the condition most suitable, although that is not absolutely necessary: a thin garment worn is admis-



PLATE XXXVI.—Showing Vibratory Movement of Viscera.



sible, and will not interfere with manual examinations. Begin with the neck, and examine whether all the cervical vertebrae are in line, whether one or more bones are distorted, whether one or more muscles are drawn or contracted, producing pain, drawing across important bloodvessels, nerves or lymphatics, or whether unnatural mobility is perceptible; whether the clavicles are drawn down by the contracture of the subclavicular muscles; whether the ends of clavicles are properly articulated; whether the arms are equally poised, and whether the spinous processes are in line; whether the ribs are smooth and regularly arranged, at equal distances from each other, and not drawn together on intercostal veins, that empty their blood into the vena azigos veins; or whether the ribs are not unduly pressing upon the pleura or lungs, liver, spleen or stomach. Look to the condition of the diaphragm, whether the lower portions of the chest walls are normal, or whether they are contracted. See to it that each muscle and bone is in proper order and relationship with every other one. Examine the joints of the lower limbs from the hips down to the last phalanx of the halluxes. Find out the true state of your case if you would satisfy fully the demands and render the assistance required in all cases. This sort of an examination would convince many a skeptic of the truths of this science, and that many distortions exist that have not been seen by the ordinary doctors of the day. "There are many things true, Horatio, that have not been dreamed of."

The physical diagnosis of the whole man should be known—and not simply the organs. It will be understood that many of the so-called pathological conditions attributed to disturbance of the intestinal viscera—liver, lungs, heart, stomach, spleen, intestines—have their origin in some remote part of the body, due to partial or complete luxation of bone, the contracture of muscular fiber, that has not been noticed at all by the attending physician, so that, when corrected by the Osteopath, all of the trouble ceases. To properly adjust the system to itself is essential in all pathological conditions.



A DRUGLESS SYSTEM OF HEALING.

We urgently recommend a careful examination of all the possible probabilities of luxations, ere a conclusion is reached or determined. These things observed may save much unnecessary suffering and delay in bringing about the necessary relief to save life. These points are important to understand, and after a little experience it will be found that there is much more to consider than at first it would seem possible to find, and a proper adjustment of the system to itself, occasionally, prevents many an ache, and cures many a pathological affection that has resisted the efforts of other doctors persistently. Hence this knowledge will be found useful and fill a niche not otherwise filled.

REDUCING DISLOCATIONS.

We do not desire to enter into a long dissertation on this subject. We simply call attention to the more common dislocations that will demand the attention of the Osteopath in his practice, and he should know how to treat them intelligently.

DISLOCATIONS OF THE ELBOW JOINT.

This joint may be dislocated in five directions:

First—Both bones backward, marked strongly by alterations in the form of the joint and loss of motion; and there is considerable projection posteriorly by the ulna and the radius; on each side of the olecranon there is a hollow; the hand and arm are in a state of supination, and can not be turned prone.

Second—Lateral dislocation of both bones of the forearm; ulna thrown on either the internal or external condyle. There is increased width and great distortion of joint, and the forearm is flexed and pronated. In the dislocations outward, the radius forms a prominent swelling, and in dislocations inward there is marked and elongated projection on the inner side of the joint.

Third—The third dislocation is where the ulna is thrown backward. The deformity is very great; the forearm and arm are twisted inward, and the olecranon projects considerably. The forearm can not be extended, nor bent to more than a right angle.

Fourth—The radius is thrown forward into the hollow above the external condyle of the humerus. The forearm in this dislocation is slightly bent, but can not be brought to a

right angle. The hand is between pronation and supination.

Fifth—The radius may be thrown backward. This is seldom or rarely ever seen.

THE TREATMENT.

The first, second and third dislocations may be reduced in the following manner: Seat the patient on a chair; then take hold of the wrist; put the knee on inner side of the elbow joint, bend the arm, and at the same time make pressure upon dislocated bones, so as to separate the coracoid process of the ulna from the posterior fossa of the humerus. And while the pressure is forcibly kept up by the knee, the arm is gradually bent, and the bones will slip into their places.

In the fourth dislocation the hand should be turned supine, the forearm bent, extension made from the hand, not including the ulna in the hold.

In the fifth dislocation gentle pressure and extension will succeed in reducing it.

DISLOCATIONS OF THE SHOULDER JOINT.

The humerus may be dislocated in four directions: Downward into the axilla—most common of all dislocations of this joint; the symptoms being, lengthening of arm, a hollow is felt under the acromion, the shoulder flattened externally, the elbow sticks out from the side and can not be made to touch the ribs, the head can be felt in the axilla, and the hand can not be placed on the opposite shoulder, as in a normal condition. The second dislocation is forward and beneath the clavicle, upon the second rib, the coracoid process being felt on the outside of head of humerus. The symptoms of this dislocation are: The arm is slightly shortened, elbow projects backward, the acromion seems pointed, the depression of the deltoid is more considerable than in the preceding dislocation. The third dislocation is backward on dorsum of scapula, beneath spine, where the head of the bone is easily



PLATE XXXVII.—Manner of Treating the Soft Palate.



felt, and will be discovered to follow the movement of the elbow when located, in the movement of arm. The fourth dislocation is only partial, usually that of a pressing forward against the coracoid process. The symptoms are a projection of the acromion and hollow under it, while the head of the bone is prominent in front, and may be felt to move on rotating the elbow. If the hand of the injured side is placed upon the sound shoulder, the patient will be unable to bring his elbow to his side, and if the elbow is brought to the side, his hand can not remain on the shoulder.

THE TREATMENT.

There are many methods of reducing these luxations, such as extension, heel in axilla, knee in axilla, the use of a towel, what is termed the perpendicular method, Kocher's method, etc. The following are sufficient for all practical purposes to operator.

The simple extension method is made as follows: Pass a towel around the chest, under the arm and across above the shoulder, so as to firmly fix the scapula; another towel is fastened in a loop around the arm of patient above the elbow; extension is then made by an assistant, the operator manipulating joint. This is done while patient is sitting erect on a chair or stool. When the extension is made for a short time the operator may easily reduce the dislocation with but little if any pain to patient. The reduction is best made while the knee is used as a fulcrum, as more steadiness may be secured thereby.

The second or heel in axilla process is generally preferable. Place the patient on a table, or the floor, on a cushion or mattress, soft pad in axilla, a strong towel looped around arm above elbow, long enough to slip over shoulder of operator, the heel in axilla, using counter extension with the towel until the head of humerus is in place to slip in, then use arm as a lever, pushing the head into place, upward and outward, and at the same time pulling the limb downward and a little forward by means of the towel that is secured

around the arm above the elbow; extension being best made this way.

Knee in axilla method: The patient is seated in a chair, and the operator places one knee in the axilla, resting foot on a chair or stool, puts his hand on the shoulder so as to steady the scapula and shoulder joint, with the other depresses the elbow over the knee, and presses head of bone into place with hand.

Reduction by the perpendicular method: Place the patient on a low chair or a couch, and then raise the arm perpendicularly by the side of the body, or head more properly, at the same time fixing the acromion, and make gentle traction, replacing head of bone by turning arm in a semi-turn either way, so as to place the head of bone in socket or junction with head of scapula. If but little force is required, the arm may be taken in one hand, gently stretching it upward, and steady the acromion with the other. Should more force be required, an assistant may steady the shoulder, and the operator may use his foot against acromion. When the bone is felt to slip into its place, the arm must be brought down to the side, while the head of the bone is held outward by the hand in the axilla.

Kocher's method: The forearm is flexed on the arm, then turned outward as far away from the chest as possible; the elbow is then carried well forward and upward. Rotate the arm inward and lower the elbow, when the head of the bone will probably fall into place. This may be done without using an anesthetic.

The extension used in any dislocation forward must be made downward and backward at the same time. For dislocation backward, the extension must be made forward. After reduction, a small pad may be placed in the axilla, and the arm and the shoulder held in a sling until all soreness subsides; the roller held by a bandage, and the joint held quietly.



PLATE XXXVIII.—Dorsum, Leg-Extension Treatment.

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DISLOCATIONS OF THE HIP JOINT.

Of these there are four: Upward on the dorsum of ilium, downward into the thyroid foramen, backward and upward into the ischiatic notch, and forward and upward on the body of the pubes.

The first (upward on dorsum of ilium) happens more frequently than any others of the hip joint. The symptoms are: There is at once perceived a difference in the length of the limb, change from a normal position, toes turned inward, diminished motion and a flattening of hip. The toes rest on the tarsus of opposite foot; the knee and foot are turned inward; the knee slightly advanced to front and resting on other leg (thigh), above the knee of its fellow; the limb one or two inches shorter than the other, and legs inseparable.

The second dislocation—into the thyroid foramen: The dislocated limb is two inches longer than the other one, and in those thin in flesh the head of the bone may be felt on pressure. There is usually flattening on side of hip, and the body is bent forward. The toes point to the ground, and the foot may be turned either outward or inward.

In the third dislocation—backward into the sciatic notch: The head of the bone is resting on the pyriformis muscle. The limb is from one-half to one inch shorter than the other one. The toe rests on the ball of the great toe on the other foot. The knee and foot are turned inward; the toe touches the ground, not the heel, when standing. Not much flexion or rotation of the limb can be made.

The fourth dislocation—on the pubes: The limb is shorter than the other; knee and foot are turned outward, and can not be rotated inward; the head of the thigh bone is readily felt on the pubes.

THE TREATMENT.

These dislocations may be reduced by manipulations. They may not be easily done, except in recent luxations, and usually require several attempts to do. The muscular con-



tractions due to putting them on an undue strain are difficult to overcome after a time elapses after dislocation.

1. Dislocation upward on dorsum of ilium.—To reduce this dislocation we use the limbs as levers, the trochanters as fulcrums, by which the head of the femur may be slipped into place. The knee must be bent on the thigh and the thigh on the abdomen or pelvis; the operator, grasping the ankle with one hand and the knee with the other, causes the thigh to perform circumduction movements toward abduction, finishing with a rotary movement of the femoral axis, when the head of the femur will probably slip into place. The limb may be reduced frequently and more easily by placing the ankle of the dislocated limb across the knee of the other limb, the patient sitting on a stool or chair, knee flexed, placing one hand at the hip joint, putting the breast on the knee, pressing it down to a right angle, and with the hand holding the ankle, patient relaxing as much as possible, operator suddenly jerks the leg off the knee against his side, and the joint goes in place. Professor Bigelow recommends that the thigh be flexed with a little inward rotation, producing inversion of the toes, and then the thigh should be abducted, circumducted, and at the same time rotated outward. This has been described in the directions—"lift up, bend out, roll out."

2. For the Dislocation Downward.—Rotation inward of the flexed and slightly abducted thigh upon the fulcrum of the Y-shaped ligament.

3. The Dislocation Backward.—Dr. Bigelow reduces this dislocation by circumduction of the flexed thigh inward, so as to unlock the head of the femur, and then abducts and everts the limb with an outward jerk.

4. Dislocation on the Pubes.—Flexion, combined with abduction, may be tried. If not successful, abduct thigh backward and downward, placing hand against head of femur, pressing it downward under rami of pubes, then abduct with flexion, suddenly jerking limb downward and outward.

These operations should be thoroughly studied before



PLATE XXXIX.—Dorsum Treatment of Kidneys.

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beginning to operate on them. Frequent and oft-repeated attempts at reduction may result in inflammation, and the proper diagnosis of conditions, location, muscles involved, should be duly considered before undertaking to manipulate.

It may be objectionable to some to use pulleys, but in some instances it will be found easier on patient and operator to do so. The luxation on pubes is one of the most difficult to reduce, and the operator will find that the pulley will be of immense service in its reduction. Extension and counter-extension may be made so gradually as to produce but little if any pain, and the reduction may be made by simply a slight pressure on head of bone. If the pulley is used, care should be taken to use well-padded bands in the groin and around the limb, and the pulley should be manipulated with a crank, so as to completely govern its action, being particular to use only enough force to let the head of the femur pass the edge of the acetabulum—not to increase the existing laceration of the capsular ligament around head of joint.

With the proper care, nearly all of these dislocations may be reduced, making many a lame person leap for joy. There is no propriety in letting these dislocations go on for years, for they may all be set, if taken in time. Osteopathy has gained most of its laurels in setting "hip joints." Many a case that has gone to an Osteopath with lameness, limping and using crutches, has gone away without them, leaping and clapping his hands and vociferating with all the thankfulness imaginable. Study your cases, and manipulate the parts until sufficient relaxation of the muscular structure warrants any attempt to set, then try it. Keep trying until it is accomplished.

DISLOCATIONS OF THE KNEE.

The knee is often dislocated, and there are four ways it may be out of place, to-wit: First, Inward—The tibia projecting on the inner side of the joint, and the condyle of the femur resting on the external semilunar cartilage. The sec-



ond dislocation is where the tibia is thrown on the outer side of the joint, the condyle of the femur being placed on the inner semilunar cartilage. The third dislocation—the tibia is dislocated forward. The fourth dislocation is when the tibia is luxated backward. Symptoms obvious, and easily recognized.

THE TREATMENT.

Each of these dislocations may be quite easily reduced by extension and counter-extension. The great tendency in the injuries of the knee is to take on inflammation, and it will be important to enjoin absolute rest after injuries to the knee (of any character whatever) until all soreness has subsided.

In the adjustment of the toes and fingers, gentle extension and pressure are all that is necessary to be done. The same may be said of the wrist.

Bunions are caused by dislocation of the third joint of the great toe, and cured by setting the joint and keeping it in place by cotton pressed between it and second toe. Repetition of the setting will be required to keep it in place in some cases.

For further information regarding luxations consult the large works on surgery.



PLATE XI.—Scapula, Dorsum and Shoulder Treatment.



FEVERS AND THEIR TREATMENT.

FEVERS.

The phenomena in the body characterized by a rise of temperature, increased circulation of the blood, marked tissue change to a greater or less degree, disturbance in the secretions, mental excitement or depression.

The causes of fever are a mooted question. Many theories are advocated, but the most plausible seems to be that of central disturbance near the corpus striatum, due to blood pressure. The cause of the blood pressure is as much a mooted question as the cause of fever.

As all heat is due to molecular change or friction, or chemical changes, it is very reasonable to attribute the cause of fever to bi-chemical changes, causing increased molecular action. It is not our purpose to argue this question, but submit the above for consideration.

It is a fairly well settled fact that certain stimuli to the vaso-motor filaments along the sides of the upper cervix ordinarily modify the circulation and regulate it, and reduce fever. Inasmuch as the vaso-motor nerves control the peristalsis of the muscles surrounding the arteries, regulating the size of the caliber, and these nerves are the end filaments that we stimulate, it follows that the regulation of the circulation of the blood is through the said filaments, but necessarily starting from the center or starting place of said filaments. Some have supposed that the heat disturbing or regulating center is near the corpus striatum. Be that as it may, impeded circulation may be rationally responsible for the increase of temperature we denominate fever, the disturbance originating from pressure due to contraction of muscular fiber, which was due to excessive or undue irritation of

terminal nerve filaments; cold, contracting down on end nerves, or poisons introduced into the system, irritating nerve centers or paralyzing them. The normal temperature is said to be $98\frac{1}{2}$ degrees. In fevers it may rise to 106-7 degrees, or even higher, and the tissue waste is in proportion to the temperature and the duration. The disordered secretions are usually manifest by the deficiency in quantity, the dryness of the tongue, clamminess of mucous membrane, thirst, high-colored urine and constipation.

GENERAL TREATMENT OF FEVERS.

The first indication would seem to be the reduction of the temperature. The reader will please to bear in mind that fever is not a disease—only a symptom. Inasmuch as the Osteopath uses no medicine, it becomes a matter of great interest to know how he is going to reduce the fever. Time-honored and long-cherished habits demand a plausible reason for discarding medicines in this instance. Doctors have had recourse to aconite, veratrum, antifebrin, antipyrine, spiritus nitri dulcis, etc., for long years, and for any one to pretend to say that fever could be reduced without the use of some one or all of these agencies elicits intense criticism. To appear on the arena as a physician without medicine or prescription blank, and pretend to possess power and knowledge sufficient to control the temperature of the one possessed of a fever, seems the height of presumption by the medical fraternity, and they are ready to denounce such a pretender as a fit subject for an insane asylum. Notwithstanding the announcement by them of the fact of fever being caused by a disturbance of the nervous system, they are unwilling to acknowledge that a regulation of the action of the nervous system will cure fever—unless, perchance, it comes as a result of medication. What singular beings we are!

These are the means the Osteopath uses to reduce fever. It matters not what name the fever is dubbed with, what



PLATE XII.—Spinal Concussion, Knuckle Treatment.

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typhoid, typhus, scarlet, dengue, yellow, cerebro-spinal, enteric, intermittent or erysipelatous, the Osteopath has but one remedy—that is, Take Off the Pressure. This cures all manner of disease. The general treatment to restore the general circulation over the whole body is to be remembered, and the proper pressure on the sides of the cervical vertebrae (from the base of the skull), the occiput, down the neck for a space of three or four vertebrae on the terminal filaments of the vaso-motor nerves in that region, from two to five minutes, regulates the action of the peristalsis of the arteries perfectly, satisfactorily. The pressure should be made lightly at first, gradually increasing the pressure to a sense of a little uneasiness, and holding the fingers steadily there for a longer or a shorter time. This results in a remarkable lowering of the temperature, and starts the perspiration in every pore in the body. It does it, too, without injury to the patient. This is the universal treatment for all fevers. Care should be exercised that too much pressure be avoided, for in some diseases there is a liability of a return of fever, and if the former pressure has produced soreness in that region, it makes it painful and unpleasant for subsequent manipulations; hence due care should be exercised.

The Osteopath has recourse also to the natural fluid of the body, to-wit: Water. As water constitutes about seventy per cent. of the human body, it is essential that it be kept supplied. Water is the most complete solvent of the elements of the body components known, hence should not be lost sight of. A disturbance in the system, remember, is caused by molecular changes, and these changes are largely due to precipitation, coagulation of the albuminoids for lack of the solvent, water. The necessity of this fluid becomes a matter of eminent importance, hence it should be furnished. The fever patient then, should have this supplied at short intervals in quantities varying according to demands, thirst, etc. The warm bath is also at times essential. Directions for bathing should be followed as described elsewhere.

In all fevers the friction is caused by decomposition of the elements. Decomposition may ensue from two causes: The one being due to disturbance of nerve centers, producing paralysis of nerve filaments all along the line to their terminals, and the other from pressure somewhere along the course of the nerve—in or on its surface, or at its terminal. Either of these causes produces a like result. The stimulus at the center may be due to direct pressure on the center, or by reflex influences from pressure, or from poisons introduced into the system and absorbed, more than the system has power to eliminate. Here is a clincher and a hard nut to crack, for the medicine man to solve and dispose of satisfactorily. The use of water, as the reader may now understand, becomes a matter of urgent necessity in all cases of fever. The temperature of the bath should be about 80 degrees at the start, and after being in it for a few moments, cold water should be gradually added, and the effects upon the patient carefully observed. When the surface begins to turn moderately turgid, blue, the effect is produced that is needed for the time. Take the patient out of the bath now and remove the cloths or sheet used, wrap in a dry sheet or blanket, place in bed and exclude the air from the body until reaction ensues, or the patient has had a refreshing sleep. The fever is now measurably lessened by this process. The body should be dried, after due allowance of time has elapsed, from all accumulations of perspiration, and the clothing changed to clean, dry, well aired spreads; the patient instructed to take deep, long inhalations of air (through the nostrils), retaining air as long as is comfortably possible, and go through a half a dozen or more of such exercises at once—or at one sitting, as it is termed. This should be done every bath, and the bath should be repeated from every three or four hours to once or twice a day until the fever is cured. All this time let the patient have no victuals, fruits, nor any food of any sort until the tongue cleans off, and food is called for. The patient will do that. Don't be uneasy about the patient



PLATE XLII.—Liver, Chest and Side Treatment.

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starving. You sit by and wait until nature asserts herself. Then it is time for you to move in that direction. What would you think of the sense or the judgment of a man driving a horse, tired, worn down by a heavy draft, up a steep hill, pulling all his exhausted strength would allow, and strained to do that, and the driver (the doctor or nurse in this case) were to add more weight, and lash the beast to make him increase the effort to pull the weight? Would you tolerate such a manifestation of abuse—of downright cruelty? You say no. Then make the application! Take Off the Pressure if you would cure anything in the form of disease. See?

The above principles embrace the treatment of all fevers, and to be successful you should lay aside your prejudices (if you have any) and treat every case on similar principles, and something like the course marked out.

It is said by one author, in treating fever, "Don't starve a fever"—and after giving the pathology showing that the system could not assimilate food, demonstrated his utter incompetency to decide the matter physiologically. If the system is not capable of assimilating food, why tax the digestive organs with work it can not do? And if it manages to automatically go through the process, without the proper mixtures of the secretions necessary to be taken up and converted into assimilable material, where is the reason for it? We then lay this maxim down as universally applicable: Do not feed any fever. When the tongue is coated, every tissue in the body is deficient of power to work—run down and closed up all of the workshops, lain down to rest—what sense is there in shoveling in more debris? Wait until nature calls for help (food); then, and not till then, is it proper to feed a fevered patient. That will then be when the system no longer has fever. Your patient will not starve! The whole nervous force has turned its attention to renovating the system of its poisons, and you need not, under any circumstances, undertake to change the order of things. The already accumulated

nerve substance will not decrease in its effort to clean up the house that has not a comfortable apartment in it. You stand off, hands off. Remember that nature is now master of the situation; she is asserting her prerogative, and she will perform her labor, if left alone, perfectly; and if you will sit by and watch her wisdom in sweeping and garnishing her apartments, you will learn a lesson you never knew before.

"Well," one says, "what are you going to do for your patient? Are you going to sit and let your patient starve?" "Who ever heard of such a cruel wretch?" "Won't let his patient have anything to eat, eh?" "Here waste is reducing the flesh every day, and not a mouthful of food has that poor, sick boy had for six or eight hours." "Poor thing! He is almost starved! Why, since I come to think about it, he hasn't had a mouthful of food for twenty-four hours! Ain't that awful? Starve! Doesn't that look like it?" This is about the sort of expressions that will confront the sensible physician while he is watching his patient. But we opine that if our directions are followed, medicines all thrown to the cess-pool, all food withheld, and the proper nursing afforded, your patient will come out of his sickness in a much shorter time, stronger, recuperate in half the time, and be better every way, less mentally beclouded, brighter intellect, and sooner fit for doing duties devolving upon him or her! Don't feed your fever patient!

The fever is only a symptom, and not a disease. Where is the trouble? What produces the fever? We regard fever as a result of chemical changes in the elements—friction of the molecules, due, in many instances, to capillary disturbance, resulting in congestion, or hyperæmia (which means too much blood in parts). Decomposition (tissue metamorphoses of a degenerative character) takes place, friction ensues, heat is the result.

It is pretty fairly well settled now, that the circulation of the blood in the arteries is controlled by stimulation of the cervical vertebrae at the upper and back portions, as well as



PLATE XLIII.—Manipulation of Spine, Dorsal Treatment.



other vulnerable spinal localities, and that when this is effected we become masters of the situation. All treatment for all sorts of increased temperature should be wisely directed to these localities—never lost sight of. For any and all degrees of temperature, for all of the so-called fevers, whether from a slight cold to a burning scarlet or a raging typhoid, the neck is the first place to look to and to begin to treat the patient. Gentleness can not be too urgently enjoined at first. Here is the throttle-valve that controls the moving of “the world,” the cosmos, and it is important that the degree of pressure on the lever be cautiously heeded!

The patient should have a comfortable resting place, provided with pleasant surroundings, plenty of light, pure air, and of the proper temperature (ranging from 65 degrees to 70 degrees). The body should have its quota of pure water, and at short intervals, and of a temperature suitable to the condition or desire of the patient. If there ever is a time to use water for “salvation,” not of the spiritual man, but of the physical, now is the auspicious time, the use of which is the essential thing—internally, externally, and I might reasonably insist eternally, so far as the fever term continues. The temperature of the water is a matter to be duly looked to—to be considered. It is a strange peculiarity in nature that she selects the things suitable in all instances, if allowed to dictate for herself. The motto should be: According to condition of the patient. The bathing in water of the whole body is a question that requires much judgment on the part of the nurse, as regards the time to remain in it, the temperature of the bath, and the intervals that should elapse between baths. The temperature of the body, the stage of the malady, the strength of the patient, and the effects of the bath on the temperature, should be the suggesting factors in this matter. It should be remembered that the reduction of the temperature depends upon the removal of the sources of friction that causes the fever. During the bath there is absorbed into the system a considerable quantity of water; this, being the most



diffusible stimulant, nature accepts with delight as a solvent—a harmless solvent of all of the elements in the body. The indications in cases of fever become apparent to the physician as well as to all other practically common-sense individuals (pardon the expression and the applicability). At any rate, use water. Give the patient water—pure water—a little at a time, but give it often. Do you know that water puts out fire, and that it contains two parts of oxygen?—the very thing that purifies blood; and a demand for this element is loud and persistent as long as heat continues? Use water, then, in all fevers. The evaporation of the water is causing the fever. Supply it, and the fever is cured. This is the way to feed the patient—starve the fever—drown it.

TYPHUS FEVER.

Synonyms: Jail fever, ship fever, and contagious.

This is an acute, infectious, epidemic, febrile state; comes on suddenly, producing great depression of the vital forces, characterized by a peculiarly sickening odor, eruption of a measly character all over the body, except on the face, and presenting a deep, dusky flush, and a glazed appearance of the skin; pupils contracted and eyes flushed. There is extreme tenderness of the shin bones, muscular soreness, extreme prostration, vertigo, tremors and subsultus, and most generally attended with constipation (this is the peculiar characteristic), with the eruption like measles, except on the face.

The symptoms of this fever simulate cerebro-spinal fever very closely, only that the rigidity of the muscles of the neck are more pronounced in cerebro-spinal fevers. The complications may be pneumonia, swollen parotid glands. The mortality ranges from five to thirty per cent.

THE TREATMENT.

The neck muscles should receive our special attention.



PLATE XLIV.—Arm Extension, Upright Treatment.



The evidences of capillary congestion are marked in the mottled skin and eruption. Manipulate the neck and spinal muscles thoroughly, profoundly; lift the clavicle, stretch the neck, and rotate it; elevate the chest and stimulate spinal muscles by rotary vibrations upwards and outward; also treat in like manner (the rotary manipulations of the hand) over liver, stomach and bowels. In fact, the whole system needs a general treatment, being careful not to use too strong force. The vaso-motor region will demand attention to reduce the fever.

The moderately warm bath will be indicated as often as once a day, stimulating the skin by dashing cold water on the body after coming out of the bath. Use water clysters daily, and give pure water to drink every half to one hour in moderate quantities. Use nothing in the way of food until the system is in a condition to assimilate it.

Notwithstanding the extreme prostration, food is not indicated. Get rid of the poison, relieve the congestion, start up the circulation, arouse the nerve forces, wash out the debris, and then the system will call for what it needs. To break the spell that holds the mind enchained—the craze to feed the sick—is what we desire to emphasize.

RELAPSING FEVER.

This is a sort of a bilious typhoid famine, febris recurrens, spirillum fever, self-limited disease, lasting about six days, and said to be contagious and epidemic.

After it has lasted about that time it suddenly or gradually subsides into a remission, to be again followed by another attack similar in character, but associated with an alteration of the structure in the viscera (which is said to contain micro-organisms—the spirilli of Obermeyer. (Wonder why he turned them loose in that particular fever?)

It is said that the cause of this particular affection is contagion. Specific! It is also stated that "it acquires its

greater activity from filthy, crowded and unhealthy populations, amid which it prevails." The beast that causes this disease is a regular "corker," but he is only seen in the minutest form (and that in the blood) after the fever has set in. During the "fever" he is a minute screw-shaped beast, spiral in form; hence the appellation we dub him with, "a regular corker." It is said also that the spleen is covered with a fresh fibrinous exudation—that the corpuscles present a mottled appearance; that its pulp is more or less softened, swollen, and malpighian bodies are perceptibly enlarged; and the liver and kidneys are swollen, enlarged, congested.

The characteristic symptoms: There are no premonitions. This fever comes on suddenly, and the fever will rise to 102 degrees to 104 degrees, and continue high for several days, with rather a weak pulse, headache, sick or nausea, vomiting, and lancinating pains in the limbs and muscles, especially the calves of the legs, followed by fullness, pressure and more or less pain in right hypochondrium. This may be due to swelling of the liver and spleen. Jaundice is a frequent accompaniment and of frequent occurrence. The seventh day the crisis comes—the fever ends; and about the fourteenth day the symptoms return, but generally in a milder form, and continues about four or five days, when slow convalescence begins. Emaciation considerable, and relapses may be repeated several times.

The medicine doctors give quinine, although they acknowledge that it has no power to prevent the relapses. Their treatment is largely expectant! The use of morphine takes precedence here (for pain), and the carbolic acid, cerii oxalas, ferrum, and quinia. They acknowledge that they do no good in this disease, yet the patient must take his medicine! Having had much experience with this fever, we readily understand why medicine does no good. I did not understand why the medicines failed to cure it when I formerly treated so many cases in the southern, hot climate; but do now, and this is the very reason that I am writing out a



PLATE XLV.—Method of Stimulating Vaso-motor Nerves.

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rational system of treatment that will cure, or be the means, if practiced, of taking off the pressure and letting nature right herself. Remember our text: Take off the obstruction that produces the lesion, and disease no longer exists. Pathology means pain. Pressure produces pain; therefore take it off, if you would cure your pathological conditions at all times and everywhere.

THE TREATMENT.

It will be remembered that fever is only a symptom, and not a disease, and the question arises, always, What is to treat? The cause or the symptoms? If the bug is the cause of this fever, as asserted by pathologists (or at least supposed to be the cause), why make so much delay in arresting his ravages? Then why give quinine? Why give carbolic acid, or why give anything? We protest against the whole bug theory of disease, and regard no such harmless creature as productive of results attributed to him, hypothetically, or really, or probably. The materies morbi causing infectious disease results from the capillary or venous obstruction or obstructions somewhere in the body. All pain has its origin in blood stasis, causing pressure on terminal nerve filaments, severing the connecting terminals. Tissue degenerative metamorphoses result; materies morbi manifests itself; a nidus is formed; catalysis contaminates; decomposition ensues; infections come in as a result of chemical changes; the blood becomes contaminated, and whatever the elementary constituents of the secretions be in the particular part where the stasis occurs, in its transition from one chemical to another, the results are accordingly.

This organism of ours is the most complicated chemical laboratory that divine thought ever created, and even receives impressions from the thought of the individual which at once produce chemical changes that restore the possessor to life and health, or send their wailing and depressing influences through every tissue in the body, changing them to morbidity, which results in death itself. The delicacy of this

human structure is inconceivably delicate and impressionable. A change of the whole career of man is often the result of a whisper, because the thought therein turns the whole tide of life. Then how important it is to know how to start the proper forces in the system to control the movements of the fluids that contain the life of man! Osteopathy understood is a leverage that moves the world, and its benign influence will spread from sea to sea, and the far-off isles will clap their hands for very joy when its marvelous possibilities are fully comprehended. The medical profession, with its combined wisdom, should possess such a leverage as this to combat with the arch enemy, disease. The simple truth along any line of thought seems to be the last, the slowest and most difficult to comprehend and accept of all things. Every conceivable excuse that the heart of man can devise seems to be called forth as a justification of their opposition and rejection! We need not repeat this proposition, for it has floated on the very surface of history adown the ages, and is constantly verified; and I opine the Psalmist uttered truth when he said, "All men are liars"—the legitimate fruit of the seed sown. The truth, however, is mighty, and will eventually prevail.

The Osteopathic treatment for relapsing fever, then, is the same as for typhoid fever.

CEREBRO-SPINAL MENINGITIS.

This is regarded as a malignant, epidemic affection, characterized by suddenness of attack, severe headache, vomiting, severe and painful contraction of the muscles of the back of the neck and spine, delirium, disorders of the special senses, coma, stupor, and a spotted purpuric eruption under the skin, showing symptoms of decided congestion. These lesions are found along the meninges of the spinal cord in post-mortems.

The cause seems to be unknown. The micro-organism



PLATE XLVI.—Extenso-rotary Neck Treatment.



seems to exercise considerable influence in its production, so said by some authors. The bacillus theorists have not discovered the means of entrance of the "critter" as yet, and they are in doubt whether he is going to produce spotted fever, erysipelas or pneumonia in his peregrinations through the system. To make such ado about a bug seems altogether out of proportion to the facts in the case. It is also strange that this "bug" should have a peculiar predilection for the young. The attacks come on suddenly, even while the little one is in the height of glee, and on the street, suddenly prostrated, without any premonitions whatever. Strange bug that!

The causes of this pathological condition seem to be wholly wrapped in mystery. The unfruitful search for outside causes and influences leaves the profession halting and guessing what might be, and failing to find what is the cause. To give remedies under such circumstances seems the height of folly. To "beat the air" seems to hold out the idea that enemies infest the very air we breathe, and call forth our whole man in physical array to fight effects—and the profession claim to be the arbiters of the health of the people! While there are many circumstances in the environments that tend to contribute to the production of diseases, yet these should not center in some peculiar "bug," and then assume that it has produced the changes in the system that manifest the various symptoms found in pathological conditions, and then theoretically assume that the treatment of symptoms is the proper guide to govern practice. Where is the trouble in this affection? This is the thing to settle. Remove that, and health comes back and resumes its throne. Take Off the Pressure. This is the universal remedy!

Capillary congestion is the sole cause of this affection. Arrest of circulation of the blood and other fluids of the body—decomposition—change of chemical elementary constituents—the materies morbi resulting from these decomposing elements, caused by the inhalation of the poisoned atmos-

phere, from telluric and atmospheric changes. The lesion is in the meninges of the brain and the spinal cord. Remove the obstruction and the effects cease at once! Do not wait on the uncertainties of presumptive medication.

The drug that the profession relies the most on, opium, arrests all tissue change, and only tends to increase the speed of the patient to the realms of "kingdom come." This blunts all sensibilities, and the doctor rejoices in the idea that this is the salutary remedy. To the Osteopath this seems the height of stupidity and ignorance of the proper method of relieving the afflicted of the cause of the trouble—congestion.

It is said that there are three groups—the common, the fulminant and the abortive. The common begins with a chill, severe headache, nausea, vomiting, vertigo, and a sense of extreme weakness, and within a short time the muscles of the back become rigid, painful on moving the head or neck, retraction to the extent of oposthonos ensues, extreme restlessness, hyperesthesia, cramps in the muscles (especially of the legs); spasmodic twitchings occur, and frequently spasms and delirium. Added to these symptoms there are intolerance of light, blindness (sometimes sudden), more or less deafness, loss of smell and taste. The temperature and pulse are irregular. Much else might be said of this form of the disease. There is another form that is called the fulminant form, ushered in by a severe chill, great depression, followed soon by a collapse, into which the patient sinks and never reacts therefrom. The abortive form is not so severe, and may not be pronounced only in some respects during the course of an epidemic; that is, different in type only and point of severity. The prescribed remedies of the Regular School of medicine are opium, quinine, ergota and iodide of potassium, tar plasters and cold compresses.

THE TREATMENT.

The Osteopathic treatment is similar to that of typhus fever, with special attention to the vaso-motor area and all



PLATE XLVII.—Manipulating Muscles of Back of Neck.



along down the spine—taking off the pressure all along the line, and everywhere. Reflexes are prominent characteristics in this disease, and special regard to the sphincter muscles must be had. The pressure must be taken off the sympathetic nerve filaments; arouse the secretions, unite the forces at once, or disintegration soon sets in, and the lesions become sources of materies morbi of a malignant type. Use plenty of water, internally and externally. No food to depress the already exhausted digestive organs. Let the patient have rest of body and mind, and only treat enough to take off the pressure, then let patient rest. A crowding of the stomach, or the administration of opium, is surely uncalled for. To relieve the excessive pains, take off the pressure, start the forces to moving out the debris. Do not wait until special symptoms develop. Remove the cause (the obstructed circulation of the fluids of the body), and you cure your disease, or it gets well itself.

Fortunately for the people, this disease is not a frequent visitor; but when it does appear, it leaves a trace behind—not only carries off many, but leaves the balance in a condition that death would better have occurred to its victims—crippled, blind, deaf, or demented! Horrible state to contemplate! When Osteopathy is properly applied, such results will cease. The cure should be as readily effected as that for diphtheria or scarlet fever, typhus or typhoid fevers, and this is true of many other affections thought to be incurable.

The re-establishment of nerve force takes place when the pressure is removed. The almost universal pressure will be found in the jugulars and cervical muscles.

LA GRIPPE—INFLUENZA.

Synonym: Epidemic catarrhal fever.

This is an acute, infectious, sporadic, epidemic fever, usually accompanied with more or less inflammation of the lungs, and always affects the nervous system intensely, pro-

ducing extreme prostration, out of all proportion to the seeming severity of the fever.

The causes are said to be various. A specific bacillus is thought to be the cause by some. Others suppose it is induced by soil, climate, atmospheric changes. We are not going to stop here to argue the bug theory of disease.

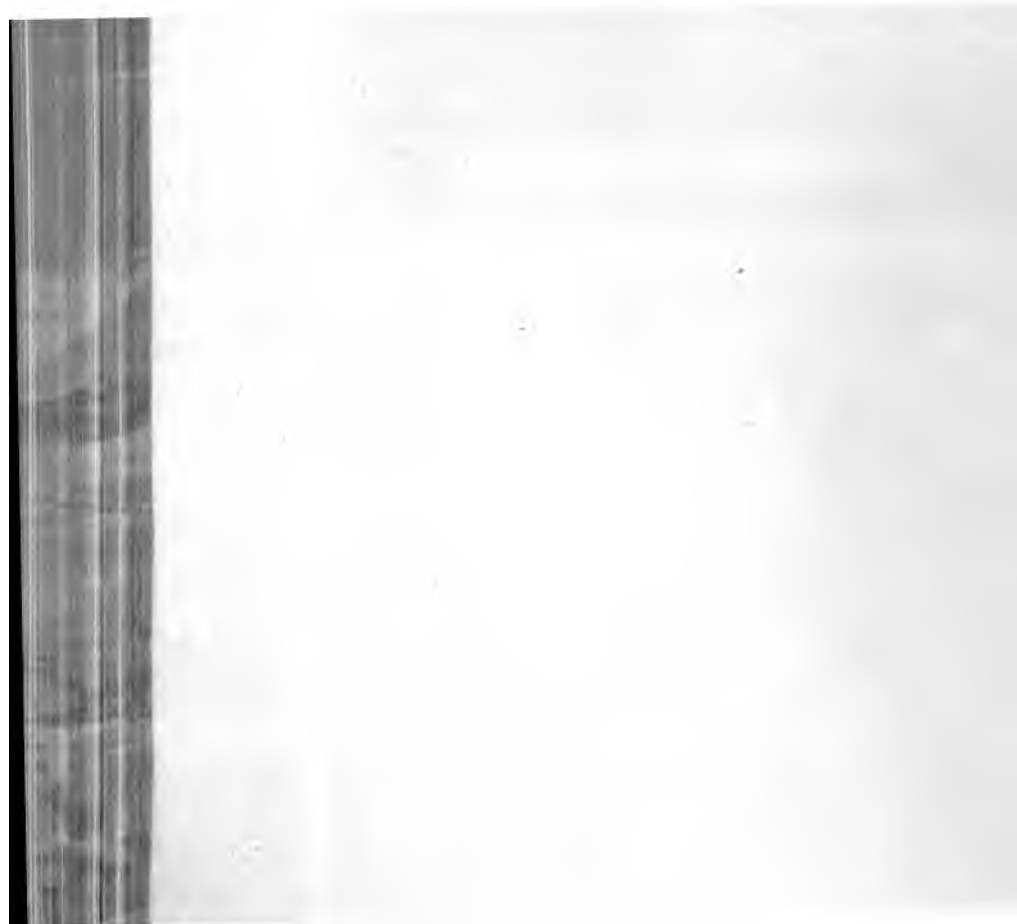
The symptoms of the affection are as varied as the causes assigned by pathologists, as regards variations and intensity, from the slightest illness to the most grave, often ending fatally. The onset is usually sudden, beginning with a chill, lasting a longer or a shorter time, then fever sets in, reaching as high as 103 degrees, with a rapid, soft pulse, shooting pains in the muscles, over the eyes, frontal sinuses, chilliness down the spine, hoarseness, with more or less pain, deafness, running at the nose (thin watery secretion at first), eyes watery, a dry, irritative cough, affecting the bronchial mucous membrane; the tongue has a brownish, nasty fur on it; loss of appetite, pains in the bowels, especially in the epigastric region; nausea, vomiting, and often a diarrhea. There is more or less melancholia, extreme debility, tenderness of the skin; dullness of intellect is common.

The duration ordinarily is about four days to seven days. Relapses frequently occur. One attack seems to render the subject extremely susceptible to other attacks, and it is a good deal as the Irishman said of his case, when he had La Grippe: "He was sick six weeks after he got well."

The complications are usually those of a bronchial or pneumonic character, leaving the patient with a severe, hoarse, harsh cough. Headache is a common sequela; neuralgia, enlargement of the glandular system, especially the lymphatic glands. Many cases of consumption date their origin to an attack of La Grippe. The prognosis depends to a great degree upon the strength of the person attacked, and the kind of treatment. The extreme prostration of the patient is the prominent characteristic symptom. Its sudden onset is likewise a source of differentiation from a bad cold.



PLATE XLVIII.—Chin-Occipital-Neck Extension.



THE TREATMENT.

All of the symptoms of this disease point to a cerebro-spinal nervous affection. The excessive disturbance of the whole intestinal tract and the severe muscular pain indicate a disturbance of the sensory and the sympathetic nerves. The equilibrium of these forces (or conductors of forces) is disturbed. Atmospheric influences, cold, have produced capillary congestion in the posterior terminal filaments; hyperesthesia ensues; capillary congestion results from stenosis of the capillaries; decomposition of the blood ensues, and the absorbed poisonous materies morbi, mistaken for the bacillus, produces extreme prostration, vomiting, diarrhea, etc. Now what is the indication?

In this affection the spine must receive our special attention, pressing steadily for two to five minutes on the upper cervical and then the brachial, dorsal, lumbar and sacral regions once or twice a day. The neck should be thoroughly treated, and a general and thorough manipulation should be given, but more especially the spine and chest should receive attention. The chest and heart treatment, raising the clavicles, stretching the cervical vertebrae, and the whole spine, takes off the pressure, and the treatment of the spine strikes at the root of the whole difficulty. If properly treated, the pain is at once relieved, and no bad consequences follow. To free circulation is the prime object in this affection. Watch complications and meet them promptly by appropriate treatment. Let the patient use plenty of water, bathing, drinking it, and ablute the spine once or twice a day at least. Keep special watch of the glandular system, the heart and lungs, free the circulation; treat the twelfth dorsal to energize the kidneys. Elimination must be looked to especially in this, and all poisonous infections—an exchange of excesses for normal commodities should be surely made.

The proper stimulation of the spine relieves the prostrating symptoms as well as the congestion. Restoration should be rapid, if no food is allowed until the secretions are

restored to a healthy condition. The thing the Osteopath will have to contend with will be the prejudice of the masses. The old way is so thoroughly fixed in the mind that no other way seems to them the right thing to do. The idea of curing such an affection with manipulations seems to be the height of ridiculousness and absurdity. It is our experience that these manipulations act like magic in this affection, frequently aborting the whole process at once, and if not, so modifying it that the patient is free from pain, weakness and lung or bowel complications, which in other treatment is not satisfactory. If a fever is allowed to run its course, what is the use of medication? The fever should be cured by removing the congestion, which is done by the manipulations indicated. The treatment should not be automatic, nor should the practitioner of this science become an automaton if he wishes to succeed.

CONTINUED FEVERS.

All fevers that continue with a steady progress, increasing gradually or persistently, without either a too decided rise or fall, are called continued fevers. Simple continued fever may be of short duration, and may be mild in character, and present no marked malignancy or perceptible lesions, and yet be fatal. So continued fevers should receive special attention during their prodromal or forming stage, for lesions may lurk somewhere in the system without pain.

The causes of fever: It is said by pathologists that fevers are caused by fatigue, exposure, atmospheric or sudden changes of temperature, excesses in eating, excitement, violent exercise, miasmatic influences, etc.

The symptoms: In the continued fever, the onset is usually abrupt, with a feeling of lassitude; then a chilliness or a decided chill; then a rise of the temperature of the body, pulse rapid and tense, headache, skin dry and hot, thirst, coated tongue, costiveness, scanty, high-colored urine, some-



PLATE XLIX.—Vibratory Movements, Neck and Back.

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times nausea, vomiting, and in children there may be convulsions.

The duration varies from a few hours to several days. The temperature within a short time will reach as high as 103 degrees, or even higher. This may continue for a day or two, and then there appears a condition called "a crisis." This is an abrupt termination, usually with some critical discharge, and it may continue without any special change, only a gradual falling, and terminate in a normal condition. There appears usually, as the fever subsides, herpes on the lips and around the nostrils. This is recognized as a termination of the fever.

THE TREATMENT.

An important thing is rest in bed. Relieve the contents of the colon of any accumulated feces by non-irritating clysters, such as warm water, followed by the constipation treatment, if necessary. Bathe the body all over (in a bath is the preferable way) every three hours to every twenty-four hours, as directed for general treatment of fevers. Frequent sponging of the body is admissible at any time. Warm water is preferable usually. If there are pains in the abdominal viscera, use cloths or towels wrung out of warm or as hot water as the patient can bear, applied to the abdomen, covering the whole of the bowels; then cover all with a dry towel, and repeat this process as often as the cloth becomes a little cool or too dry, until all pain and fever subside. Give no food of any kind. Let the patient have water at short intervals, say every half hour, either hot or cold. Stimulate the vasomotor region gently from five to ten minutes, as often as desirable to regulate the action of the circulation, stimulating down the spine gently on either side of the spinous process every four to six hours, and see to it that all obstructions to the circulation of the blood in the neck are looked after.

TYPHOID FEVER.

This affection goes by several names, and on account of its affecting the whole system, it is hard to miscall it. The common appellations it goes by are: Enteric fever, gastric, nervous, mesenteric, autumnal, typhus. It is said to be acute, self-limited, due to specific poison, and comes on gradually, usually with nose-bleed, dull headache, stupor, mild to raving delirium, red tongue, gradually turning brown, cracked sordes on the teeth and gums, abdominal tenderness, diarrhea being also an early symptom, tympanitis, soreness and gurgling in right iliac region, rapid prostration; patient inclines to want to lie on the back, with knees drawn up. The lesions are always present in this fever, and they are found in Peyer's patches and the solitary glands. The various stages of this inflammatory process are: First, the infiltration, hardening, ulcerative, cicatrization. The spleen enlarges, and every gland and tissue in the body become involved and share in the effects of the lesions. The symptoms of the different stages need not be enumerated, for the variations only consist of increased and intense persistence of what have been enumerated, on up to the end of the fourth week, in severe cases; varying in mild cases, and simulating a mild attack of intermittent fever. The temperature varies from 101 degrees to 104 degrees during the twenty-four hours, assuming a regularity peculiar to that fever, and simulating remittent fever. The prostration increases as the fever varies, the perspiration is profuse, stupor persistent, especially during the fever; the tongue is intensely dry, hard and cracked, frequently bleeding; the brown sordes is thick, tenacious; pulse rapid, feeble; respirations shallow, quick; the secretions scanty and retained, and contain albumen; the stools are voided involuntarily; bedsores develop, and at this stage the patient usually succumbs—dies.

The medical profession has paid particular attention to this fever, and the almost universal verdict is: "You can't do anything to mitigate it; only good nursing." It seems that



PLATE L.—Showing Manipulations of Neck and Throat.



their whole interest is centered in watching its ravages, and portraying its symptomatology, rather than to remove the cause that keeps up the lesion. To assume that this affection is caused by a bacillus, and sit by and watch that bug perform its destructive ravages without endeavoring to arrest him, try him, condemn him and execute him, is to be favoring a neutrality that is unwarrantable. It certainly does seem that something ought to be done to arrest the ravages of this disease, whether caused by a bug or resulting from the poisonous effects of the decomposed products of animal and vegetable matter combined.

This is another of the nervous prostration effects, and our attention should be directed to a restoration of the nerve power by removing the accumulated debris that feeds this virus—that enervates nerve power. All lesions anywhere in the body are the result of pressure somewhere, either at the origin, along the line, or at the end of nerves where they exercise their influence on the capillaries, preventing that influence in full or partially. Congestion at once results. The pent-up blood not passing on into the veins, or the waste material prevented from entering the lymphatics, on account of inability or deficient nerve force (and especially the motor filaments), results in lesion, and decomposition begins. The consequent effects of this poisonous product being resorbed into the tissues, thence carried to and entering into the blood, manifest themselves in every tissue. During the prodromic stage is the time to arrest the whole trouble. Take Off the Pressure before the mischief ensues. This can not always be done, nor is an opportunity always afforded, because the patient does not always know what is producing the indisposition that culminates later in the typhoid state, so that the physician is not called in until the ravages have become prominent and the lesion is doing its destructive work.

At this place we take the liberty of presenting the workings of the two forces that constantly play a part in the wel-

fare of the human body. These understood, will aid us greatly in our treatment of all diseases of an inflammatory or destructive character, resulting from lesions. The Positive and the Negative forces are manifest through certain nerves, and these properly stimulated produce effects in the parts of the body where terminal fibers are distributed. We demonstrate our position and verify results almost positively in the Osteopathic treatment for pains in the stomach. It is certainly proven that the Positive Pole of a galvanic battery, exercised through a needle introduced into the flesh, produces contraction of tissue, and that the Negative Pole of the same battery breaks down or destroys tissue. These facts lead us to the conclusion that the same sort of influence is exerted in the human body, and our experiments and application of the science of Osteopathy have abundantly demonstrated these facts. That the Spinal Nervous System exercises Negative influences, and the Pneumogastric Nerves produce the Positive influences, results fully corroborate. These facts constantly held in mind, our treatments result as we deem best, provided intelligence is the chief factor exercised—(and not automatism).

" The pains anywhere in the body are due to "pressure." Whether this pressure be due to irritation of the nerves that supply muscular fiber, causing contraction upon nerves, or to partial paralysis of end nerve fiber by the accumulation of blood or waste material pressing on surrounding parts, the results are the same—decomposition ensues. If simply enough irritation is made to produce contraction on sensory end filaments, pain is the result. This force is conducted usually through sensory nerves, directed to the parts, because of the separation of the motor filaments from the sympathetic end filaments. Coordination of the nervous system must be had everywhere to produce harmony. If pressure is taken off, this state of affairs exists, and health results. If the accumulated precipitant, due to stagnation, and arresting peristalsis, remains in the tissue in the immediate vicinity of



PLATE LI.—Shoulder and Arm Raising.

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the capillaries and paralyzed nerve filaments, is not removed, decomposition ensues, friction takes place, fever is the result. The fever (heat) evaporates the watery portions of the blood, the carbonic oxide increases, and deoxygenation of the blood becomes responsible for the results. To be healthy, the blood must be regularly oxygenated; to receive oxygen, it must circulate to the lungs and skin. We recognize the locality of the lesion generally by the pain in typhoid fever, it being a prominent symptom, especially in the right iliac fossa. This condition is an early indication of its presence. The whole intestinal tract becomes involved, from the foul tongue to the fecal discharges from the bowels. The upper portion of the alimentary tract seems to be directly under the Positive influence down as far as the stomach, and the balance of the course is under the Negative influence. The one produces contraction of the muscular system, therefore a sense of tightness, contracture, impediment in the circulation of the blood, stupor as a result, headache, feebleness and soreness of muscles, a drawn expression, secretions lessened, tongue dry and cracked; and in the lower half of the body the reverse—especially in the lumen of the intestines; a relaxed state, secondarily at least; discharges from bowels, a breaking-down of the mucous membrane of the ilium, and in fatal cases, perforation. It seems to present a condition of disconnection of the two poles, and as both of these forces are controlled by the organic nerves, it becomes apparent that there is a failure of connection of the end filaments of these, one set being separated from the others, and disarrangement is the consequence. Therefore, to right the trouble, a proper union must take place. Our means of bringing about this desirable consummation, that harmony shall once more reign, and order come out of confusion, are at hand. The connection is established through the spinal nerves—the splanchnics very largely. But to reach a condition that these nerves may exercise their wonted influence, the pressure must be removed—the debris must be removed.

—then connection can be established. The supply of water should be furnished, ingesta should cease until the accumulated rubbish is removed, and the receptacles prepared for taking care of it; and this is done satisfactorily with the supply of water furnished to the system in the right manner, remembering that about 70 per cent. of the whole body is water, and that that commodity has been evaporated by the heat (the fever), and the elementary substances held in solution by the water have precipitated, become incompatible, non-assimilable, and must be resolved and the waste tissue washed out, so that connection to end nerve filaments can be re-established; then the forces are normal, action begins—normal action—which is nature's own method of surmounting the difficulties resulting from congestion.

THE TREATMENT.

The manipulations should begin at the vaso-motor center, or at least as near to it as possible (and that is at the back and upper portion of the neck), holding the fingers firmly there from two to five minutes, and then stretching the neck by placing one of the hands on back of neck and the other under the chin; make gentle traction, then a rotary movement each way from a normal position; then move all of the muscles of the neck carefully, deeply and effectually, lifting them from their moorings; then raise the clavicles, stretching all of the chest and intercostal muscles, using vibratory movements over the abdomen, stomach, liver, spleen and pancreas. Turn patient on the side, raise the arm, pressing fingers of other hand against the sides of spinous processes, and while extending the arm, use pressure upwards and outward along the spine, on down as far as the twelfth on either side. Manipulate lumbar region, using vibrations freely. This should be done daily, or perhaps twice each day, provided care be taken to treat mildly. The tympanitis should be relieved by warm water injections into the bowels, and by hot applications in the form of towels or cloths wrung



PLATE LII.—Showing How to Strain Elbow Joint.

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out in hot water and placed on abdomen. Water should be administered to the patient (to drink) in small quantities, every half to one hour. Frequent sponge bathing should be used. The whole body should be bathed in water of a temperature of 80 degrees from ten to fifteen minutes, every three to twenty-four hours, and the head wrapped in a wet towel while bathing; the patient should then be wrapped in a dry sheet or thin blanket, placed in bed, and allowed to rest and sleep. These measures should be repeated daily as long as there is any fever. Give *no* food nor fruits of any kind until the tongue *cleans off* and becomes normal, and the patient calls for food. Then is time enough. Do not be uneasy about starving your patient. This is the proper course. If there is too much action of the bowels, press the knuckles against the left side of the twelfth dorsal vertebra for five minutes, steadily, firmly, bending shoulders backward, or stretching the leg backward, with thumb on left side of the vertebra named. This course of treatment will be eminently satisfactory in its results, and the mortality need not be anything, if treatment is begun in any reasonable time.

YELLOW FEVER.

Synonyms: Yellow Jack, bilious malignant fever, black vomit.

This is an acute, infectious disease, paroxysmal, and usually divided into three stages: The Febrile, the Remission and the Relapse (or the collapse), characterized by violent fever and yellowness of the skin of the whole surface, and "black coffee-ground vomit." It seems to be a specific poison, raging in the Southern States, at high temperatures. It is not due to malarial poison, usually prevalent during the summer months. In some places in the South it is never absent, and in other localities it comes periodically. Neither age, sex, race, nor social conditions show any preference to the disease. The peculiarities of the disease may not

be uninteresting to know, therefore we here present some of the pathological symptoms: The skin assumes a yellowish, lemon-colored appearance; the blood seems to be dissolved to a greater or less degree; heart seems to be softened, the stomach veins deeply engorged; mucous membrane seems to peel off, and the excreta present the appearance of coffee grounds, consisting really of blood and mucus, epithelial cells and debris. The intestines take on a similar condition. The liver is yellow, and fatty degeneration of the cells is a frequent accompaniment. The kidneys assume a granular degeneration, but there do not seem to be any morbid or pathological changes in the spleen. The pulse runs high, and the temperature rises from 104 to 106 degrees in a few hours. Severe neuralgic pains in the head, limbs, stomach, back and joints; the patient is extremely restless, delirious; urine scanty, acid, high colored, and contains albumen, and has a peculiar odor (as well as the whole body), never to be mistaken after once inhaling it.

The Regular School of medicine regards the disease as "self-limited," and the only way to arrest its progress is in one or all of the three following ways: "Isolation, disinfection and depopulation." The Homeopaths have not said so much, but regard it as a curable affection. The question is, What has the Osteopath got to say about the treatment for this disease? To retire from the conflict and acknowledge defeat before a fight is the characteristic of cowardice. To even pretend to acknowledge that "there is no cure in Osteopathy for it," is a concession unworthy a great science. What is the matter that Osteopathy is not applicable to it, as well as to any other known condition due to capillary congestion? Think of a physician in the conflict with an enemy of mankind, and pleading inability to help because he has no knowledge of what to use, or how to use it if he had it, then to say: "No remedy in Osteopathy for it." What is Osteopathy for? What is disease? What produces disease? What is the matter in yellow fever that Osteopathy, properly



PLATE LIII.—Raising Clavicle, Patient Sitting Up.

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and intelligently applied, will not relieve it? We say it will cure it, therefore we earnestly recommend it. The depopulation measure seems to be the most probable measure contemplated, judging from the Regular way of treating it. They utterly fail to adapt means to ends, or this writer is most egregiously ignorant of natural cause and effect—purgation, vomiting, diaphoretics and diuretics!

THE TREATMENT.

In the treatment of yellow fever it will be noticed that there is a diffusion of bile through the whole system, producing extreme yellowness of the skin. This state exists everywhere in every tissue in the body where blood can flow. The shortness of breath indicates chest contracture and diaphragmatic irritation—capillary congestion everywhere in the body—a congestion of the portal system and liver, as well as the breathing apparatus. The first thing to be done in the case is to relieve the capillary congestion. Begin with the vaso-motor nervous system, holding fingers on either side of spinous processes from three to five minutes, then gently stretch the neck, and manipulate all of the muscles of the neck; raise the arms, treating along down the back on both sides of the spines, clear down to the sacro-lumbar junction; springing the back by pulling the limbs backward, one at a time, patient lying on the side, manipulate the lower limbs; and then, with patient lying on the back, raise clavicles, stretch the arms up strongly, and at the same time press the fingers along the sides of the spines from first dorsum to the tenth (general treatment process). Now, with patient lying on the back, manipulate in a gentle manner the liver, stomach and all of the abdomen in a vibratory manner for a few moments. The treatment should occupy at least twenty minutes, and should be done gently, yet thoroughly, twice each day. The patient should receive frequent ablutions and baths, together with plenty of water to drink at short intervals, and supplied with the ferric phosphate and sodium phosphate, these two elements being deficient in cases with this

affection. The one supplies homoglobin and the other regulates the eliminative process. As in all fevers, do not feed your patient until the organs of digestion are ready to digest and assimilate and the tongue cleans off. Treat the spine in the splanchnic region at least twice daily; in fact, from the third to the tenth surely. The spine will be necessary to look after at frequent intervals, for the sickness of stomach; vomiting and diarrhea will require special treatment occasionally. With these general suggestions to the intelligent Osteopath there ought to be no difficulty in relieving any case of yellow fever. The vaso-motor area should be mildly treated when indicated from a too rapid or a too slow or any irregularity of the heart's action, and the vibratory movements along the dorsum and region of the liver. If you do not feed your patient, with the above directions followed, you will restore him to health by the treatment suggested. We have been thus particular and specific on account of there going forth from an Osteopathic writer the annunciation, "There is no cure for it in Osteopathy." Rest assured there is. Osteopathy is applicable to all pathological conditions, and that, too, with more certainty of relief than any other treatment—properly and intelligently applied. The more you know of it, the more confidence you will have.

INTERMITTENT FEVER.

This is regarded as ague, chills and fever, swamp fever, or malarial fever.

It is characterized by a cold, a hot, and a sweating stage, the phenomena observing a successive regularity, according to the type, and having a complete intermission, varying in the length of time from a daily paroxysm to several varieties of characteristics. The tertian, or every day; the quartan, occurring the first and fourth days; the octan, or that occurring every week or eighth day; the duplicated quotidian, two paroxysms every second day; the double tertian, daily par-



PLATE LIV. -Raising Chest Muscles and Treating Spine.

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oxysm, but more severe every second day; the dumb or masked ague, an irregularity, and presenting peculiar phenomena. All ages and sexes are liable to this affection.

The causes are attributed to a peculiar bacillus malaria from the low-lying atmosphere in swamp and marshy districts. There are numerous varieties of these bacilli! The period of incubation of this disease varies from a few days to several weeks. This is another fruitless search for a bug! It is strange that this malarial bug—the ague producer—vanishes into thin air at the presence of an Osteopath! A slight move of the spine in a certain direction, in a particular manner, scatters this beast, and he leaves his lurking place as completely as if he were a soldier under marching orders. All is quiet and serene as a May morning at the presence of the manipulator. Singular, isn't it?

Symptoms: Each paroxysm has three stages—the cold, hot and sweating. The cold stage begins with prodromes, lassitude, yawning, headache, nausea, followed by the chill; the teeth chatter, skin turns pale, nails and lips blue, and the surface rough; the appearance of goose flesh is a prominent peculiarity, and great thirst (in some cases), with a rise of temperature to 104 degrees. The chill may last from a few moments to one or more hours, and the hot stage is gradually ushered in as the shivering ceases, which is usually accompanied with a continued rise in temperature, reaching as high as 106 degrees in some cases, and with children to 107 degrees, and accompanied with spasms. The pulse now becomes full, headache and nausea increase, intense thirst, dry, flushed skin, scanty urine, sleepy, indifferent drowsiness settles down over the whole person, and this stage continues from one to three or four hours, when the sweating stage is ushered in gradually, beginning at the forehead and spreading over the entire body. The fever lessens, coming down to a normal temperature, and a general feeling of comfort returns until the next paroxysm. This paroxysm may come on the next day, but the tertian type is the most common; and there

may be an intermission of one day, when the patient will feel comfortable and revel in the hope that he will not have a return; but all at once he begins to yawn and stretch, cold, chilly sensations creep up his spine, the feet and hands and nose get cold, the lips turn blue, ears and face pale, eyes become somewhat glassy looking, and he soon settles down to a season of "shaking," characteristic of this kind of fever.

It is useless to state that the almost universal remedy for this affection is quinine. The resort to quinine is the almost universal custom; and yet it often fails to do what is desired. It seems to be the most successful in those forms characterized by the three distinct stages. Given in two- to four-grain doses, every two hours, until as much as twenty grains are taken, beginning long enough before the next expected chill to have taken the last dose of the quinine one or two hours before the expected chill. The quinine is to be repeated the fourth, seventh, fourteenth, twenty-first and twenty-eighth days, from two to four doses each day, as mentioned. Months are sometimes passed before the victim has immunity from this affection under the use of the very best selected remedy, or remedies.

The Osteopath neither gives the quinine nor protracts his case. The cure is effected at once, generally in one treatment. This silences all objection to this science with the suffering victim of chills (and the long dosing with quinine).

Sometimes this fever assumes a pernicious type; when the whole system becomes purple, the lungs become congested; in fact, the whole body becomes so, accompanied with severe pains in the lumbar region and abdomen, with delirium, severe headache, stupor, drowsiness, and sinking prostration coming on rapidly, when it is known as a "sinking chill." These are extremely dangerous types of the malarial fevers, and are regarded with fear. The intermittent fever is the bane of some districts, and about the only sickness. It seems to come on after all of the summer's work is over, and the farmer has begun his period of rest from his sum-



PLATE LV.—Knee-Chest Expansion Process.



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mer's labors. About two weeks elapse, and the chills set in, and frequently the whole fall months are passed with chills, then merge into some other type, such as typhoid or pneumonia, due to general exhaustion from long sickness.

THE TREATMENT.

This should embrace the whole person, beginning at the cervical region, moving the muscles thereof thoroughly, strongly, deeply; stretching the neck with rotation, and raising clavicles; raising arms; manipulating spine all the way down, pressing hard and for some time, from the fourth dorsal to the ninth, raising arms and pushing back the chest therewith strongly, requiring deep, full inspirations at the same time; treating the liver, spleen and abdomen thoroughly by vibrations and manipulations, stirring them up thoroughly; then, lastly, holding the fingers on the vaso-motor region from two to five minutes; then pulling the arms backward, with the knee against the back, two to four times, ending with the pressure at the eighth dorsal. This treatment, begun half an hour before a paroxysm, usually arrests it at once. Two or three treatments cure the worst cases.

REMITTENT FEVER.

Synonyms: Bilious fever, bilious remittent, marsh fever, typho-malaria.

This is a paroxysmal fever, with exacerbations and remissions, in which the temperature is constantly above normal. It has a moderately cold and an intensely hot stage, but the cold stage does not recur at each recurrence of the hot stage. There is usually an intense hot stage, with violent headache, gastric trouble, irritability, often vomiting. There is scarcely observed any sweating stage.

The cause is attributed to the presence of micro-vegetable organism, the generic species of which seems to be a little in doubt.

The symptoms: During the cold stage there is a moderate chill, the temperature rising one or two degrees, the tongue slightly coated, headache, pains through the body, and sick, oppressed feeling in the epigastrium. During the hot stage there is persistent vomiting; thickly furred tongue, pulse full, rapid, flushed face, injected eyes, severe headache, pains in limbs, loins, hurried respirations, temperature rising to 104 degrees, or even to 106 degrees; the bowels costive, stools tarry and very offensive, the urine scanty and highly colored, with uric acid present; the skin becomes yellow, and delirium is a common accompaniment. The sweating stage comes on in from six to twenty-four hours, when all of the above symptoms somewhat abate, or greatly modify, and slight sweating occurs, and the temperature may go down to 100 degrees, or as low as 99 degrees. This state may last a longer or a shorter period, called the stage of remission. After from two to eight hours the symptoms recur, generally minus the chill. This in turn is followed by a remission. These paroxysms go on for a period of from seven to fourteen days, but sometimes the fever ceases to remit; then it becomes continuous, simulating typhoid fever; then it is called typho-malarial fever.

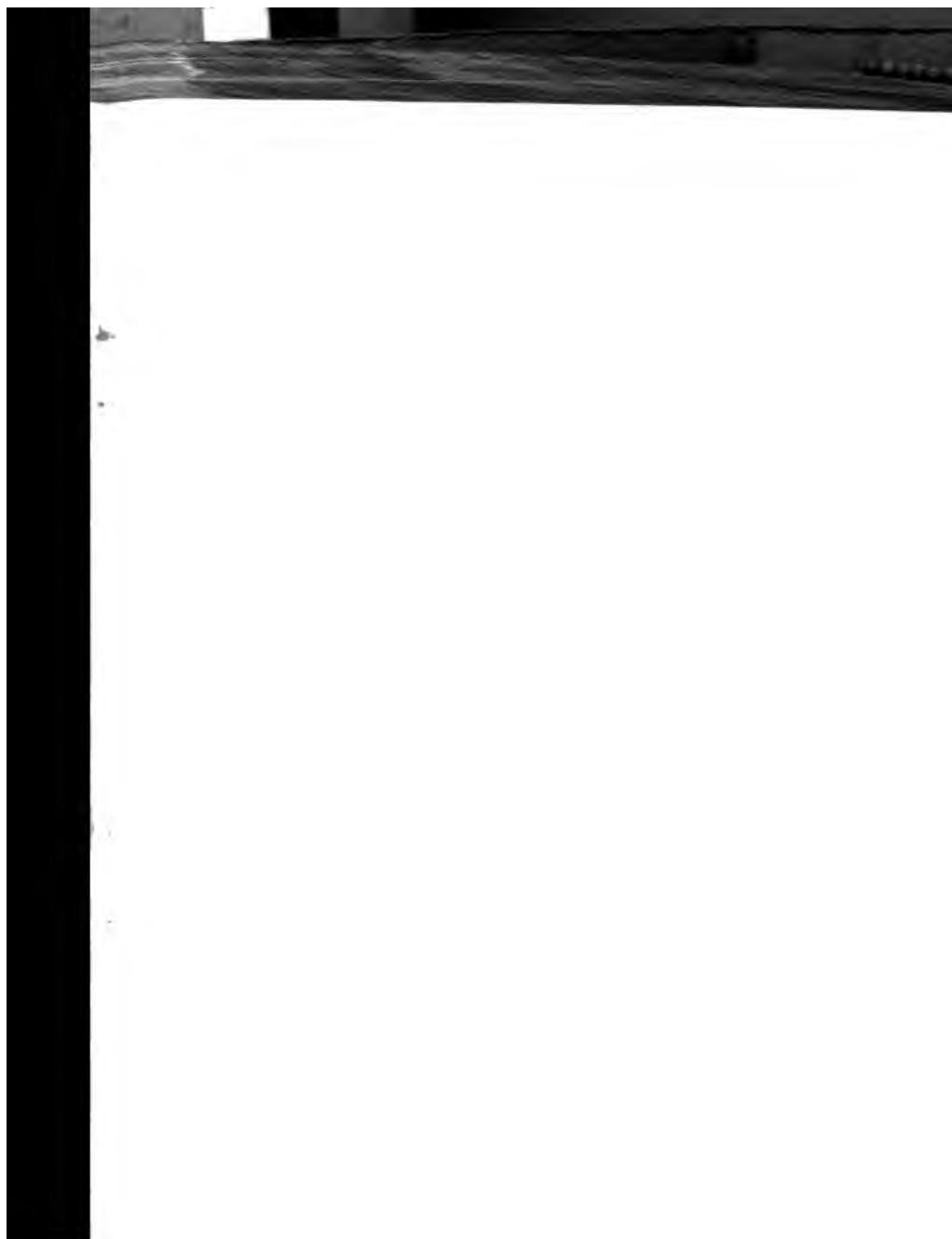
It is said that this fever can be positively diagnosed by an examination of the blood, finding therein the bacillus malaria, and that as soon as this is gotten rid of, or eliminated, the fever subsides. As is the usual custom, quinine is the sheet-anchor in this fever. If some process could be discovered to open the gate and drive the bug out, what a saving of suffering to the patient!

THE TREATMENT.

This should consist of stimulating the vaso-motor area, the manipulations of neck muscles, freeing the chest muscles, and a thorough spinal treatment, and especially the splanchnic region. The bath and sponging the whole body at frequent and indicated periods may be done, and clysters of warm water and hot applications over abdomen and around loins



PLATE LVI.—Side of Neck and Shoulder Treatment.



will be found soothing to the patient. Drinking water at frequent intervals should be particularly observed, remembering that in all fevers the per cent. of water in the blood is lessened by evaporation, and it must be supplied to hold in solution the poisons. Then the freedom of the circulation of the fluids restores the equilibrium.

PERNICIOUS FEVER.

Synonym: Malignant intermittent fever.

This is a malignant, destructive malarial fever, which may be intermittent or remittent in form, characterized by intense congestion of one or more internal organs, together with interference of the functions of innervation.

There are several varieties of this fever: The Gastroenteric, producing intense nausea, vomiting, purging, tenesmus, burning in stomach, intense thirst, cold feet, cold extremities, shrunken features, and a general and intense depression of all of the vital forces. This condition may last from a half an hour to several hours, when an intermission or a remission occurs. There is also a Thoracic variety, characterized by intense congestion of the lungs, with violent dyspnoea, gasping for breath, fifty or sixty respirations per minute, oppressed cough, frequent, weak pulse, cold surface, and distressed-looking features. Then there is a Cerebral variety, characterized by intense congestion of the brain, effusion sometimes of serum into the ventricles, violent delirium, followed by stupor, coma, slow, full pulse; flushed or livid surface of the whole body. There is also a Hemorrhagic variety, called the yellow disease. It is followed by nausea, vomiting, dyspnoea, severe pains in the region of the liver and kidneys, bloody urine, yellow surface of whole body. There is also what is termed an Algid form, characterized by intense coldness of surface of the whole body, with a temperature internally of 104 degrees to 107 degrees, with a cold and clammy perspiration, cold breath, voice feeble, indistinct;

pulse slow, feeble, almost imperceptible at the wrist; and yet, with all these symptoms the mind remains clear and distinct, while the countenance looks death-like in appearance. This fever may last from a few hours to a few days. It is intensely malignant, and the subject rarely survives a third attack. It is a lamentable fact that all varieties are unfavorable, unless it can be controlled before the second paroxysm. The mortality is about 15 per cent. This fever is the most dreaded of all except the "Yellow Jack," and is equally as fatal.

THE TREATMENT.

The treatment usually instituted is of a character that seems more like an attempt to obscure still further the inner workings of the malignancy of the affection. When it is manifest that important organs are paralyzed from congestion, to give opiates that still further arrest tissue change and impede circulation, seems altogether wrong, destructive, and uncalled for. The perniciousness is wholly due to the impediment to the circulation. This is due to overstimulation of nerve centers from poisonous malarial influences. The restoration of the circulation is the all-important thing, and the thing that must be effected before recovery can possibly be expected. When it is understood that the splanchnics are intercepted from performing their functions, thus causing the congestion of the internal vital organs, the indications for treatment will become apparent. The spinal nerves control motion—the lack of motion causes the whole trouble; this can only be brought about through the spinal nerves. Then, beginning at the vaso-motor area, hold the fingers here until a regularity of the pulse ensues. After the vaso-motor area has been duly attended to, manipulate the neck muscles thoroughly, and attend to the elevation of the chest muscles, clavicle, arms, and the opening of the gateways from the brain—the jugulars; then pay special attention to the spine, all the way down, in the usual manner, giving special attention to the kidneys area. The thorough manipulations of the liver, spleen, and abdominal viscera should receive

a good share of vibratory, regularly-applied attention, and a general treatment instituted as often as circumstances indicate and the patient is able to endure, remembering that in this condition, more than in any other form of fever, circulation is important, and without it recovery can not take place. The free use of water enemata should be one part of the programme, and water should be given the patient frequently as a drink. The sickness at the stomach may be overcome by treatment at the fourth to the eighth dorsal vertebra, stretching the right arm upward strongly at the time, lowering fingers each time the arm is raised and lowered, uniting the positive and negative forces. All of the rubbing should be from extremities toward the heart. Hemaspasia of lower limbs should not be lost sight of in this condition, and should not be neglected when a condition presents demanding its application. The sickness at the stomach should be overcome by the stimulation of the splanchnics. The vagi terminals may be reached about the fourth to the eighth dorsal, and more easily and effectually on the left side, as the left are more active and respond easies. The nerve influence obtained here controls Auerbach's Ganglion, a set of fibrillae in both the circular and longitudinal muscular fibers of the stomach, as well as intestines. The splanchnics uniting with the pneumogastric, forming the posterior portion of the solar plexus, control the action, sensation and motion, as well as reflexion of the intestinal viscera, and being reached through sympathetic filaments along the sides of the dorsal vertebrae, the peristalses that arise through irritation of the vagi, anywhere along the line, from the fauces to the ends of their remotest terminals, are controllable by stimulation of the dorsal region named.

To obtain the results at once, take hold of the left arm, stretch it out, pulling it up strongly above the head with one hand, and with the fingers of the other placed along the sides of the spinous processes, pressing moderately hard with ends of fingers, push the arm gently backward, pressing at the

same time with the fingers on the back as aforesaid, and let the arm be pushed downward over the arm of operator suddenly. This may be repeated one or more times, but usually once accomplishes the purpose. This treatment is applicable in all cases of vomiting from irritation of the fauces or along down the alimentary canal. The pressure with finger ends, raising body gently, at the same time without the raising of the hand, will frequently do the work.

ERUPTIVE FEVERS.

These all have a period of incubation, characterized by more or less fever preceding their eruptive stage, each with its own peculiarity. The period of childhood is most common for these fevers to occur in. They usually occur but once in the same subject. Their origin seems to be still wrapped in mystery—undetermined.

SCARLET FEVER—SCARLATINA.

This is an acute, self-limited, contagious, infectious disease, usually of childhood. High temperature, rapid pulse, diffused scarlet eruption, terminating in desquamation of the skin, mouth and throat, and affecting, more or less, the nervous system. It is an inflammatory condition of the skin—a dermatitis. The cause is supposed to be a specific poison, highly contagious. There are three varieties of the affection: Simplex, Anginosa and Maligna. In the mild cases the fever is trifling.

The onset is decidedly sudden, ushered in with a chill, pain in the throat, and followed by high fever, running up to 105 degrees, with rapid pulse (110 to 140 per minute), and at the end of twenty-four hours a scarlet rash appears on the neck and chest, spreading over the entire body rapidly, and in a few hours the eruption presents a spotted appearance, with normal skin between the scarlet spots. When the erup-



PLATE LVII.—To Raise Clavicle, Arm Leverage.

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tion occurs there is a burning sensation of heat on the surface, the throat becomes painful, a catarrhal exudation ensues, and a difficulty of deglutition supervenes; the tongue is furred and later dry and red, with prominent papillae, of a "strawberry hue"; headache, great restlessness, and in some cases delirium and spasms; diarrhea is quite common. On the fourth or fifth day the fever declines, and the sixth to the eighth day desquamation begins, continuing for two or three weeks. Convalescence is nearly always slow, emaciation marked, and the sequelæ dreaded, as it affects the whole system, leaving in some cases a sore throat, otorrhea, chronic diarrhea, subacute rheumatism, chorea, endocarditis, pleuritis, acute Bright's disease, and cutaneous dropsy, as well as general anasarca.

The treatment of this affection and the success following Osteopathic treatment has been the most satisfactory of any ever known, and if it would not cure anything else, it deserves to be crowned with a golden wreath, filled with costly jewels of the most precious kind. It has surely demonstrated itself as the most efficacious measure ever tried for this affection.

THE TREATMENT.

The manipulations should be made carefully, thoroughly. Begin with the vaso-motor nervous system, holding the fingers there firmly from two to five minutes. This regulates the arterial circulation of the blood. Now begin at the sides of the neck, manipulate all of the muscles gently, deeply, thoroughly, raising the clavicles so as to free the neck veins, that all of the lymphatics may empty themselves into the jugulars; raise the arms successively, treating the spine on either side of the processes, as low as the lumbar vertebrae; then hold the hands on either side of the spines of the lumbar vertebrae, fingers pressing close to spines; raise gently the loins, letting the head and feet barely touch the bed, holding the body thus suspended for a moment. This corrects the bowel trouble at once. The vaso-motor area is to be looked

to and fever subdued by gentle pressure here occasionally. Manipulate all of the muscles of the neck thoroughly, beginning up close under the chin and angle of the jaws, occasionally stretching the neck, but being careful about rotation often, remembering that children should not have too much stretching and rotating of the neck. The outward movement of the spinal muscles should be made, and the rotary vibration movements used on the back from the region of the scapula all along down the back, and on the chest and abdomen. Frequent bathing in warm water, afterward wrapping patient in dry blanket or sheet, and anointing the whole body with olive oil, rubbing the body in a rotary vibratory motion, with the hand moistened with the oil, answers a double purpose. In this, as in all fevers, do not be anxious about feeding your patient. Nature will assert itself when the tongue cleans off and the glandular system has recuperated from the nervous shock; then, and not till then, is it proper to indulge in food of any sort whatever. Use water internally and externally, as suggested in other fevers.

This treatment is applicable in all of the eruptive fevers and throat affections. The philosophy of all Osteopathic treatment is to remove the pressure, and the means to accomplish this depends upon the indications in each individual case, and should not have to be suggested to the intelligent Osteopath in every form of disease, but should suggest itself to him in all cases and under all circumstances, as presented. The object to accomplish in all cases is to take off the pressure. No trouble exists or can possibly ensue where this is done. Remember that stagnation or stasis of blood produces chemical changes that result in pathological conditions that we denominate disease. Disease is the very thing we are called upon to cure. "How is it cured?" should be constantly thought, and the "how to do so" is to take off the pressure, wherever it is, and in the best manner, and as rapidly as the nature of the case will permit. Do not stand by, like the Frenchman, for an introduction, or a suggestion to do the



PLATE LVIII.—Manipulation for Goiter.

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work. Go at it with a determination to accomplish it, intelligently, and do it. If you do not know what to do, when, or how to do it, step down and out, and send for somebody who does. Don't let your patient die on account of your impudence, stupidity and ignorance. Osteopathy means something. It means relief to the afflicted in the hands of sensible and intelligent manipulators. None others should tamper with disease that demands an intelligent familiarity of the science. This book will enlighten very one who studies it on all the means and measures necessary to successfully combat all manner of diseases, whether acute or chronic. We right conditions, but do not treat disease. Take off the pressure everywhere under all circumstances. That is enough.

MEASLES, SMALLPOX,

VACCINATION, VARICELLA, ERYSIPELAS, DENGUE.

These should receive almost the identical treatment, with the addition in smallpox of the sulphate of soda and the bitartrate of potassium. The excessive action of the Negative element calls for the use of the additional acid, and should be supplied because of a disturbance of the molecules of the sodium sulphates, hence the breaking-down of the skin. Give the patient an acidulous drink all of the time in smallpox, and do a large portion of the treatment along the dorsal region, especially in the region of the splanchnics, to normally combine the Positive and Negative forces, neutralize the excessive alkalinity of the blood that is breaking down the integumentary tissues. The application constantly of castor oil to the surfaces exposed to the air, should be strictly attended to, to prevent pitting, from the suppurative stage on. Acidulous baths are strongly indicated in suppurative diseases of the skin. When it is known that the two poles of the human battery control the acid and alkaline substances of the tissues, and that the one contracts tissue and the other dissolves it.

their uses and the manner of controlling them will become apparent in the restoration of these diseases, as well as all others. We reach these poles, or regulate their action, through the organic nervous system, producing the conditions desired at will.



PLATE LIX.—Throat Treatment for Diphtheria, etc.



DISEASES OF THE INTESTINAL CANAL.

INTESTINAL INDIGESTION.

This may be termed intestinal dyspepsia—really duodenal indigestion, a failure of the normal secretions that are formed in the mouth and stomach, due to nervous failure in the salivary and peptic glandular systems, hence an incomplete formation of chyme. Not only is the deficiency of the formation in the glands named, but in the pancreas also, and perhaps in the biliary secretion, as it takes all of the secretions to make chyle. Add to this condition a complete or partial inactivity of the muscular walls of the intestines themselves, producing stasis, or lack of intestinal peristalsis, and we have a condition properly denominated intestinal indigestion, usually characterized by pain and distension and tympanitis, experienced several hours after meals, producing anemia and nervousness. The pathologists enumerate as causes: Imperfect diet, over-eating, use of tobacco; deficient amount of exercise, too much stimulus; diseases of the stomach, liver, pancreas, malaria. Not once saying that the secretions that digest food are at all concerned in the production. Here is where the whole trouble lies—nervous exhaustion. If the nervous system had performed its function, the secretions would have been in

proper proportion, quantity and quality, and no dyspepsia would have existed.

SYMPTOMS.—They are legion. The principal are pain, flatulence, borborygma, headache, loss of appetite, pains in the limbs, with frequent attacks of diarrhea, frequent colic. The chronic form is characterized by most of these, with increased marked nervous phenomena, depression of spirits, sleeplessness, headache, vertigo, ringing or buzzing in ears, cardiac irritability, numbness, tingling in the extremities, fainting, sometimes epileptiform attacks, harsh, dry skin, urine high-colored, uric acid and oxalate of lime precipitates, anaemia, emaciation, general distress, hypochondriacal.

THE TREATMENT.

Begin with the vaso-motor system, holding that area for a short time, free all of the muscles of the neck, raise the clavicles, shoulders and chest muscles by raising the arms, and treating the spine with the fingers as the arm is raised, pulling the muscles strongly upward and outward at each raise of the arm, as far down as the twelfth dorsal. Treat both sides the same way; then have the patient lie on the back, manipulate the liver, stomach and bowels slowly, thoroughly, deeply, gently, for fifteen or twenty minutes. Take off all of the pressure everywhere. The sphincter muscles of the lower bowel will most generally need attention, and should not be neglected.

The patient lying on the stomach, relaxing all muscles, the spine should receive special attention all the way down, and especially in the splanchnic region. The rotary manipulations along the spine, over the abdomen and liver, should be carefully done. Flushing the bowels every night, retaining the water, as much as a quart, will be of great benefit. Full, deep inspirations at stated periods, and as much as half a dozen inspirations at a sitting, every two to four hours, will aid in the recovery, the patient instructed to breathe through the nostrils, with mouth closed. Permit the moderate use of water, either hot or cold, but the victuals should not be "washed down" with water at meals, nor should they be eaten in haste. Thorough mastication is important. No piece-meals should be indulged in, and if only two meals a day were eaten it would be better. The diarrhea, when it occurs, should receive the reverse treatment—from the sacrum to the first lumbar, springing the lumbar region well back.

The pains in the bowels will be readily relieved by the splanchnic treatment; that is, raising the right arm high, and



PLATE LX.—Chest and Spinal Cord Extension.

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pressing steadily, firmly, in the splanchnic region on the right side of the spinous processes.

The treatments should be done slowly and carefully, occupying from ten to thirty minutes, as often as every other day at least, until recovery. These maladies need no medicines. The positive and negative forces properly united, and all pressure kept off, are the means of cure that nothing can possibly supersede.

INTESTINAL COLIC.

This is a disease of the alimentary tract, having usually the same cause as intestinal indigestion, and only differs in character of paroxysms, being those of an acute pain, seemingly starting at or near the navel. It is relieved by the same kind of treatment (except those pains brought on from taking poisons).

Associated with this affection we may have various sorts of pain, and in different localities of the abdomen, so that it is essential that a proper differentiation be had or made regarding the true state of affairs.

Gastralgia, hepatic colic, nephritic colic, uterine colic, ovarian colic, and inflammatory disorders of the abdomen should have special attention. So also lead colic, which should receive the proper antidotal remedies, which are alum and morphia—so stated on good authority, yet Osteopathy is a more effectual remedy for the colic; then morphia need not be used, but the alum only.

THE TREATMENT.

Take hold of the patient's right arm, stretch it strongly up to the side of the head, and at the same time use pressure with the fingers of the other hand on the right side of the spinous processes from the fourth to the eighth dorsal vertebra, letting the arm down quickly for a few times, as the fingers are lowered along the spine.

If there is other trouble, treat accordingly, as indicated, repeating as often as is required. There can be no iron-clad rules for the operator to follow. It is presumed that the general manipulations are sufficiently understood to qualify the operator to do whatever should be done in any given condition.

CONSTIPATION.

This is a functional inactivity of the intestinal canal—a dormant or lessened peristalsis of the intestines and colon, usually attributed to biliousness. Yet it is said that a lack of biliary secretion produces constipation. The accusations against the liver are so numerous and groundless that it would be a great insult to the reader to even attempt to record them. It is not the liver's fault that it becomes torpid, nor is it its fault that the bowels do not get rid of the effete substances called feces. The commonly attributed causes are as groundless as it is possible to imagine. Dyspepsia, character of the food, diseases of the stomach, liver, malaria, lead poisoning, syphilis, have been enumerated as causes. The prime cause of inactivity or irregularity of action is the failure to respond to nature's suggestions. The irregularity of the movements is generally attributable to neglect on the part of the person. There is a tacit resignation on the part of the intestines to wait the convenience of the subject until the "next day," and thus a habit is formed which, duly cultivated, becomes fixed; then the patient complains of being constipated. The bowels are then moved only occasionally, once perhaps every three or four days, and then with much straining, distress, flushed face and cerebral congestion; or the bowels may be moved every day, but the stools are small and hard. These may be changed to partly formed stools, and retained in the rectum, causing much uneasiness, pain, vertigo, headache, mental torpor, palpitation of the heart and abdominal distension. The patient usually indulges the mental state that unless the bowels move once or more times each day something dreadful will happen, hence a resort to purgatives is had, and a habit is formed of moving the bowels therewith, and no movement occurs without such procedure. In the large majority of such cases, if the patient would wait, the actions would come around all right and regular. At any rate, our treatment will suffice, and no one need be constipated long; but cured of it and all of its possible consequences, without resorting to physics. The "regulator pellets," the "mild laxatives," and "the syrup of figs" may then be dispensed with. The evil consequences of these physics are equal to, if not greater, than the constipation.

THE TREATMENT.

While it is said that the "fifth and seventh ribs may be turned a little," causing inactivity of the liver, we are not disposed to



PLATE LXII.—To Stretch Chest Muscles and Cord.



believe such a statement as at all consistent with actual facts, and are not going to attempt to make believe such a thing in order to make it appear marvelous to cure constipation—"to set a rib," or "adjust an atlas," to take off the pressure (where it does not exist). Facts shall form the basis of our treatment, as well as the course to establish Osteopathy. This world has been controlled by ignorance and deception long enough, so far as treatment of disease is concerned at least, and in regard to causes as well. It seems like some are possessed largely of a desire to overstate the facts, and thus deceive for gain.

It is thought by some that the bile is the natural physic, and their constant efforts are directed to "acting on the liver" to cure constipation, as well as every other affection that flesh is heir to, and nothing seems "orthodox" unless a catharsis comes of it—in almost all cases. The regular doctor urges "a movement of the bowels" when his patient has a "malaria," when he has a colic, when he has a jaundice, when he has a diarrhea, flux, or is sick at the stomach. Think of it! The laity have no possible or even probable idea of the amount of imposition they suffer at the hands of physicians. Routine prescriptions, ranging from incompatible compounds to podophyllum peltatum, are gulped down the poor deluded victims' throats until they can't rest. All of which in no possible manner benefit the patients or effect a cure. The indulgence of such things is surely reprehensible, to say the least of it. These same medicine vendors denounce nature's own way of doing its own business, and if an Osteopath cures a case that has "suffered at the hands of many physicians," he is denounced as an infamous "quack." No law is too severe against him whom they thus stigmatize. The "world do move" nevertheless, and the "common people" are becoming alive to the fact that "there is a better way."

If it could be understood that peristalsis is the result of nervous influence, there would be little difficulty in seeing the philosophy of its necessity, as constipation is due to lack of proper nerve influence. That there are certain agencies which act by irritation of the mucous membrane, and some mechanically, is not questioned, but the normal action is what the Osteopath designs to establish to cure constipation. The how to accomplish that is what follows:

Place the patient on a stool, chair, or any way get-at-able; take hold of the right wrist, extend the arm upwards, place the fingers of the left hand against the sides of the spinous processes,

on the right side of the processes, press hard, holding taut, and suddenly lower the arm; then lower the fingers an inch or so, and proceed as before, covering the whole splanchnic area, beginning about the fourth dorsal vertebra. The neck should be properly extended, and the muscles duly manipulated, the clavicles raised, and the patient being on the back, the liver should receive treatment as prescribed elsewhere—the bowels kneaded from the lower right side, from the region of the ileo-cecal locality upwards, following the course of the ascending colon to the hepatic flexure, thence across the abdomen, to the left side, embracing the splenic flexure, thence down to the sigmoid flexure. This should be done several times, and the gentle tapping of the ends of fingers should not be lost sight of, nor omitted, following the same course, vibrating the abdomen for a few moments each treatment, always following the colon from its commencement to its ending in the sigmoid flexure, and vibrating in that direction likewise. The liver should be thoroughly kneaded at the same treatment, being from fifteen to thirty minutes in giving the treatment. If, upon examination, it be found that the sphincter muscles of the rectum are unduly sensitive and contracted, they should be divulsed thoroughly. It is a fact most thoroughly demonstrated, that irritation of the terminal filaments of the sympathetic nerves, by divulsion of the internal sphincter ani muscle relieves constipation, cures hemorrhoids and assists in curing more dyspepsia than almost every other method known. It aids in flushing the capillaries everywhere in the whole body.

The introduction of warm water by the aid of a fountain syringe is surely commendable, proper and right, even to flushing the colon two or three times a week. One ordinary glass tumbler full of water to every ten pounds weight of body should be drunk daily. Usually too little water is consumed, to be healthy. Remember that water is at least 70 per cent. of the fluids of the body, and that in order to hold the soluble material of the inorganic substances and disorganized material in solution so that debris may be disintegrated, carried off, ushered into channels especially set apart for that purpose, there must be a sufficient amount of water constantly introduced into the body as it becomes lessened by use or evaporation. These principles and directions carried out, will be satisfactory to both patient and doctor.

The manipulation of the first to fourth sacral: We turn the patient on the face, and move by vibratory movements on either



PLATE LXXII.—Showing Various Dorsal Treatments.



side deeply, firmly and persistently for two to five minutes—stimulating the nerve filaments that are distributed to and influence the sphincter ani muscles, relaxing them.

Sometimes there is a displacement of the coccyx, which produces hemorrhoids, constipation and other rectal disorders, which needs adjustment, and to set it right frequently corrects the whole difficulty. This is done by anointing the forefinger, introducing it into the rectum, turning the palmar surface posteriorly, curving upwards and backwards until the bone is reached, and then place the fingers and thumb of the other hand on the foramina of the last two or three sacral vertebrae, using considerable pressure to antagonize the finger placed on the inside of the rectum against the coccyx, and adjust it as needed; and when done close the thumb against the muscles and integument with considerable force, squeezing the tissue while removing the finger from the rectum. This stretches the sphincter muscles at the same time, which is usually found to be essential. This, by the way, is the Osteopathic treatment for piles (hemorrhoids), which should be repeated every five days, and will be quite effectual in very many cases. Rectal plugs are often useful also. It will be found that an occasional divulsion of the sphincter muscles conduces to a restoration of many ills that do not down with other treatment. It takes off the pressure and flushes the capillaries, and does unaccountable benefit in many ways, frequently curing many chronic as well as acute disorders. Among the acute disorders may be named flux. A full divulsion of the bowel (the sphincters) in case of flux, and an immediate flushing of the lower bowel with water as warm as can be borne, will invariably cure that affection in an incredibly short space of time. Our Osteopathic treatment, however, is so effectual that other means are usually unnecessary to resort to, or recommend.

CATARRHAL ENTERITIS.

This is placed alongside of bowel complaints, but with the addition of inflammation. It is a catarrhal inflammation of the mucous membrane of the bowels, or small intestines, accompanied with fever, tenderness, pain, and loose discharges therefrom. The locality involved gives the name to the affection—the duodenum being the seat, it is named duodenitis, etc.

It is characterized at first by a hyperaemic condition of the

mucous membrane and glands, followed or accompanied with pain, tenderness, swelling, or oedema; increased watery secretion, proliferation of the epithelium, peeling off of the mucous membrane, resulting in hemorrhage, and then followed by ulceration of the glands. These changes may involve the whole intestinal tract, involving Peyer's patches, and be confounded with the disease recognized as typhoid fever.

CAUSES. Like many other intestinal disorder, it is attributed to a specific virus, improper food, temperature of summer, exposure to cold and dampness, foreign substances ingested in intestines, such as fish bones, hard kernels of fruit, coins, stones, etc.

The similarity of symptoms in all inflammations of the intestinal tract renders them rather difficult of differentiation, and diagnosis uncertain, but a careful observer may distinguish this from typhoid fever by the prodromes in the latter, the gradual rise in temperature in typhoid fever, and the eruption; the points of difference in this from dysentery and peritonitis, by the distinct peculiarities of the two latter affections. The prognosis is generally favorable.

THE TREATMENT.

The treatment consists of thorough manipulations of the neck, stretching up, with hands at the occiput and under the chin, turning slightly while extending the neck, raising the clavicles, gently vibrating the abdomen, lightly at first, continuing the process for several moments; then turning the patient on one side, pressing the thumb and finger on either side of the spine with one hand, taking hold of the ankle with the other hand, gently pulling the limb backwards, pressing at the same time along the sides of the lumbar spines, beginning at the sacro-lumbar junction, and moving upward about an inch each time the limb is retracted. The pulling backward must be done very gently, for the pain will not permit severity. The splanchnic area should receive special attention next, treating back from the fourth dorsal to the tenth, pulling the arm up strongly each move made. The treatment should occupy about twenty minutes each time, and be repeated every six to eight hours. Flushing the bowels and drinking hot water, as directed for typhoid fever, should be observed strictly. For any fever, treat as directed in the vaso-motor area three to five minutes.



PLATE L.XIII.*a.*—Chest Expansion and Back Treatment.

CROUPOUS ENTERITIS—OR MEMBRANOUS ENTERITIS.

This is an inflammation of the mucous membrane of the intestines, of a croupous character, characterized by a whitish gray covering of the mucous membrane, firmly adherent and cemented together, and fastened to the intestine by rootlets dipping down into the intestinal follicles; characterized also by feverishness, soreness and distension of the abdomen, and pains more severe around the umbilicus, and tenderness, occurring in paroxysms, continuing for half an hour or so each time, lasting for a day or two, followed by looseness of the bowels, and each stool accompanied with tenesmus and severe pain, the stools containing mucus, with or without blood; and generally casts of mucus, cylindrical, like the mucous membrane of the bowels, come away in the discharges, leaving a feeling of raw soreness, although great relief ensues when these shreds or casts are expelled. This soreness may continue for a day or two afterward. These paroxysms may occur at intervals of a week or two, or they may not occur for longer periods—may be not for a year or two. The stool characterizes it from flux as well as from peritonitis. It is recognized as a most difficult disease to cure by the regular medical profession. A diet without fecal-forming material is recommended. It is said that it is a disease especially confined to adult life.

The causes are attributed to a peculiar state of the nervous system. That is singular, surely. What is that peculiar state of the nervous system? And yet opium and morphine, as well as hydrargyri chloridum corrosivum and liquor potassium arsenitis are recommended as prophylactics. Is it any wonder that the people are tired of doctoring?

THE TREATMENT.

This disease requires a general treatment, beginning at the vaso-motor area. Hold it for two to five minutes, and then manipulate the neck carefully, slowly, deeply, moving all of the muscles, raising the clavicles, the arms slowly to the side of head, pressing on the sides of the spinous processes firmly, and down as far as the tenth dorsal, then treat up from the sacrum to the twelfth dorsal; then, with patient lying on the back, gently vibrate with the hand the whole abdomen, beginning low down on the left side, moving to the right with the hand over the whole body, easily, slowly and persistently for several minutes; then turn the

patient on the side, stretch the lower limbs backward, holding the fingers and thumb against the lower, lateral lumbar spines, moving the hand upward each time the limb is retracted. Treat the lower limbs carefully and thoroughly, and especially empty the saphenous and other veins of the limb. An all-round general treatment should be given once a day. Special treatment of the vaso-motor and treatment in lumbar area upward, and on abdomen by gently kneading and vibratory movements, may be used every four to six hours. Hot applications to the abdomen will not be amiss for the soreness, and hot water injections should be used once or twice a day. Give no food of any kind until the tongue cleans off and the patient feels hungry. Let the feedings go until nature demands it.

DIARRHEA.

This affection is characterized by loose, alvine discharges, without tenesmus (griping), and generally due to functional or organic derangement of the digestive organs. It is frequently an accompaniment of typhoid fever, albuminuria, pyaemia, and tuberculosis. It is due to nervous shock, mental shock, atmospheric changes, change of diet, water, etc.

It may assume two forms—acute and chronic. There are recognized four divisions: Feculent Diarrhea, Lienteric Diarrhea, Bilious Diarrhea, Chronic Diarrhea.

Feculent.—That variety wherein feculent stools are discharged, attended after a short time with colicky feelings, pains, flatulency, with frequent desire to stool, and pain, relieved for the time by the stool. After four or more stools, they become lighter. This form is most usually the result of overeating, eating too rapidly, or ingesta of indigestible substances, and frequently from worms in the intestinal tract.

Lienteric.—This is characterized by frequent discharges of loose, undigested food—unassimilated food. The stools may contain mucus, covered with serum and bile, and may be mixed with undigested food. The peculiar characteristic of this form is that the patient emaciates rapidly, the irritable undigested food producing increased peristalsis, and all of the contents of the bowels are rapidly evacuated.

Bilious.—In this variety the stools are usually green or yellow, and passed with a scalding sensation at the anus, and more or less griping pains in the abdomen, owing to the excessive

biliary secretion mixed with the food. These discharges may be accompanied with or without nausea or vomiting, and any of them may merge into a chronic form, or frequent attacks of the acute form assume a chronicity by their frequency and persistency.

Chronic.—The main peculiarity is the similarity of the stools to the acute, except the stools may be changed to a pale color and assume the characteristics of a flux and present dyspeptic symptoms. Continual anemic conditions, varied appetite and chronic dyspeptic conditions are often notable and persistent for years.

THE TREATMENT.

When considered in the light of comparison as regards efficacy in the cure of these affections, the Regular School treatment stands in about the same relation to the Osteopathic that the "tallow-dipped candle" does to the modern electric light on a dark night. Our treatment wholly eclipses any other ever discovered or known to humanity. If some people even now were to be told that diarrhea could be cured in five minutes, many cases of it, with a single treatment, they would at once say it could not be done, and denounce the proclaimer a fit subject for an insane asylum. To think of such a boon to humanity—a positive, proven fact—being spurned by those who "compass sea and land" to find some specific remedy that will surely cure diarrhea! To pass by this and denounce it as a "fraud" looks so unreasonable that we refrain from giving them the castigation they deserve. A trial—yes, even one correct application—of this science to this one condition alone will convince the most skeptical of its efficacy. The very many instances of entire immunity at once places this at the head of all heretofore known remedies. To think of the grief and tears of many mothers over the loss of little loved ones, whose small mounds mark their silent resting places in the lonely charnel house of the dead, who might have lived many days to cheer them in their declining years had they been treated Osteopathically! The thought of giving relief is that others may be spared a like fate through the new and natural method of curing disease! This volume will more than repay the purchaser for the outlay in the treatment of this one affection. To know how to relieve it is many times more valuable than a money consideration, even in the "summer complaints of infants." It will be a great relief to mothers to be in possession of a remedy that will cure their babies in so short a time, so easily, and with so little inconvenience to themselves, and without distress or annoyanc



PLATE LXIII.*b*.—Different Position of Plate LXIII.*a*.

to the little one. Then, to know that the treatment is equally as efficacious for all ages only adds intensity to the interest therein.

While it may be a matter of interest to the manipulator to ascertain whether there are "slips in the vertebrae" or a "dislocated atlas," and to find "a cold spot" on the surface somewhere along the side of the spinal column, yet it will be a more satisfactory desideratum to know that diarrhea can be cured without even knowing that such are the probable diagnostic signs of the prevailing affection. That is another attempt to wrap the science in mystery and to egotize self. The facts in the matter are, the splanchnic and pneumogastric nervous systems are involved in this affection—and what does the laity know about the solar plexus or "the abdominal brain" any way? If the reverse current is turned on, the wheels turn in the opposite direction, and to know how to turn the "crank" is to know how to direct the force.

In all lienteric troubles there is an excess of negative power. The alkaline elements predominate, and what is necessary to be done is to turn on the other current—neutralize the alkalinity. And inasmuch as pressure below the solar plexus, along the mesentery plexus, reverses the motion (reverses the peristalsis), and that we control precipitation through pressure along the left side of the lumbar vertebrae, our salient point is at the first and second lumbar areas. We use pressure there with the hand, knee, or the fist or fingers, bending the body backward at the same time, holding it there for a moment or so; we start the forces the other way; that is, arrest the onward peristalsis at once. After a move or two backward, with pressure at the point mentioned, the bowel should be held or gently pressed for a few moments, or manipulated from the left side in the sigmoid flexure region upward very gently for a few moments. The patient, lying on the back, may be treated as follows: Standing at the side of the table or bed on which the patient may be, place the hands on either side of the spinous processes, at the dorso-lumbar junction; then, pressing moderately with the finger tips, pulling outward therewith, raise the body from the bed and hold it suspended, so that the back of the head and feet only may touch the bed, holding it for a moment or two, repeating same once or twice, then holding the hand on the abdomen a short time. This will usually suffice for an attack of diarrhea. For children, take hold of the back of the neck with open hand, holding the child so as to secure action, and with other hand holding the feet, lay the body (back down) across the knee, resting weight of body on the lumbar region for a moment

or so. This stretches the mesenteric plexus, through the spinal sympathetic filaments. The influence is conveyed, action is had immediately. While it is a demonstrated fact that these manipulations cure, it should not be lost sight of that there may be a necessity for looking after the spinal vertebrae, and we would not underrate its importance, yet in many instances the cause of the affection is not due to a "dislocation of one of the bones of the spine," or diarrhea would be continuous in such an event. Our motto is, "Take off the pressure" everywhere, in the application of the principles of this science. The nervous system controls the body, and interference with its action produces pathological results, and it is our business to see to it that all disturbances of it be intercepted, so that there be no interference whatever anywhere. The harmonious action of the whole body depends altogether upon the nervous system being free to act in all parts of the body. The nerves control the manufacture of all of the secretions, the assimilation of the material from the product of the food, the building up of the waste, and the removal and reformation of it into new products that go to reconstruct the blood; and a perfect coordination is essentially required to promote that harmony in the system denominated health.

In severe cases of several days' standing, where patients are greatly emaciated, rest in bed is necessary, so that nature may have time to recuperate her powers properly.

There should be due regard for a restoration of the fluids of the body that have been wasted, and as water is the essential solvent of all ingesta, it should be furnished in due proportion and at stated intervals, compatible with the conditions found, whether by oral or anal orifice, or both. The water generally is more suitable hot. As much as will assimilate or be taken up without irritation or discomfort, should be the guide as to quantity, and the effects watched, in any given case. Food should be administered according to the state of the digestive organs, but hot water will usually satisfy the demands of the system until the tongue cleans off and the salivary glands are ready to secrete the necessary ingredients to mix with the food.



PLATE LXIV—Treating Back, Lying on Couch.

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SPORADIC CHOLERA—CHOLERA MORBUS.

This is an acute catarrhal inflammation of the stomach and small intestines. The inflammation involves the mucous membrane, caused by the acrid secretions passing through and out of the intestine through the mucous membrane. It comes on suddenly, and with severe griping, abdominal pains, followed or accompanied with loose, watery stools, vomiting, cramping, cold, clammy perspiration, rapid emaciation, extreme thirst, feeble, rapid pulse, spasmodic cramping of the muscles of the abdomen and extremities, with increased prostration, often ending in collapse and death. It is extremely dangerous, baffling the skill of physicians and uninfluenced by medication. It is more liable to come on during the later summer months or in autumn, generally after the patient has been exposed to a cool atmosphere, after eating fruits, melons or trashy ingesta (a debauch), and usually in the early morning hours (about 2 o'clock A.M.) On account of its prevalence some years more than others, it is supposed that some specific cause induces it, or climatic influences tend to precipitate such a condition. Be that as it may, the condition of the person has much to do in its attack. There is no mistaking it for anything else. It has no uncertain symptoms. It completely takes possession of the person, like a thief in the night, stealing upon him at the dead hour of midnight, and grasping him at his very vitals, throws him into spasmodic muscular convulsions, rendering nerves and muscle and every tissue in the body wholly incapable of performing their normal functions. The discharges at first are the normal feces, but soon the tendency is to a watery consistency, increasing in whiteness, until finally the "rice-water" discharges become characteristic of cholera, hence the name, "cholera morbus." The patient rapidly loses strength and the body shrinks; cold, clammy sweat stands on the surface all over the body; pulse small and feeble; intense thirst is present, but liquids are ejected as soon as swallowed. A more doleful and distressed condition can not well be imagined, but this is no overdrawn description of the facts as they usually occur, often resulting in death in a few hours. The medical world has taxed its inventive genius for ages to discover a remedy that would cure this distressing and marvelously mortal disease, and found no specific in the way of medication until the Osteopath came upon the *stage of life*. If any evidence will convince the people or the *medical fraternity* of the efficacy of this system of healing, the cure

of cholera morbus ought to do so. It is the most complete success of anything ever discovered—the quickest, easiest, and therefore the best. There is such a similarity in this disease and Asiatic cholera that there need be nothing added to the description, nor need there be any difference in the treatment. The tendency of the watery portions of the blood to leave the solid constituents exists in both conditions alike, and the chemical affinity being restored cures the disease. The essential thing to do is to restore that affinity.

THE TREATMENT.

Place the knee or knees against the sides of the dorsal vertebrae at the junction of the dorso-lumbar vertebrae, take hold of the patient in such a manner as to bend the upper part of the body and lower extremities backward as far as the patient can comfortably bear, holding it in that position for a moment or two, and then let it resume its normal attitude; then repeat the process two or three times. Afterward place the hand next to the skin, and on the abdomen, pressing gently thereon for a moment or so, gradually increasing the pressure as the patient can bear it. This restores normal action of the bowels at once, arrests peristalsis, and starts the forces in the other direction. To stop the vomiting, should it not do so with this treatment, take hold of the right arm, raise it high above the head, pressing on the side of the spine hard, in the upper splanchnic region. These movements should be made slowly and steadily, giving the system time to respond before repetition of the move. The vaso-motor area should receive special attention in this affection. Treatment of the cervical region is especially recommended to equalize the circulation. The use of hot water is especially indicated, particularly the flushing of the bowel, having the patient retain it as long as possible. The introduction of the water through a rectal rubber tube several inches long is better than by the ordinary syringe nozzle, as desire to stool is thus avoided. Hot water drunk freely will be admissible also. Remember that the stream of water in the system has run out, and a replenishing is necessary to redissolve the precipitated molecules of the elements in the blood and tissues.

The splanchnic and pneumogastric nervous systems are the two prime factors to be considered in the treatment of many pathological conditions, and in no condition have we such brilliant results as in cholera morbus! A union of these two forces reversing the current, produces the most radical changes that can

be imagined. Reverse action is at once established, and the flow reversed, starts the fluids the other way, naturally. The whole matter lies in the movement of the current, and that depends upon which way the "crank" is turned (or the crank turns it). Where does the laugh come in now? The State Boards and legislative lobbyists, all of them combined, never can devise or produce a remedy that will be so effectual as is that of the Osteopath in the prompt cure of cholera morbus. What benefit is it to delineate minutely the symptoms and pathological changes of a disease and then guess at a remedy? Where is the use of standing by and watching the course of the destructive character of a disease and do nothing to arrest its ravages? That same State Medical Board will cause to be enacted laws "regulating the practice of medicine," and measures to arrest those who are as honestly endeavoring to ameliorate the sufferings of mankind as they pretend to be. What right have State Boards to select my doctor and dictate the kind of medicine I shall have thrust down my throat? If I could, I would, with one fell sweep, abolish in every State such legislative excrescences and unjust proscriptive enactments, and leave the people the right of choice.

ENTERO-COLITIS.

An inflammation of the mucous membrane of the lower portion of the ilium and commencement of the colon or large intestine. Ulceration of the intestinal glands takes place if allowed to run on, and then the affection becomes chronic.

There are usually fever, sickness at stomach and vomiting, a diarrhea, tenderness and swelling of the whole abdomen, severe or dull pain and considerable emaciation, due to general breaking down of the mucous membrane; follicular enlargement, Peyer's patches tumified and the black points projecting above the mucous membrane presenting an ulcerated appearance. In the chronic form an intensification of the hypertrophy involving the deeper structure ensues, ulcers coalesce, patches of mucus peel off, leaving the surface down to the submucous coat bare, raw, sore. This is a disease of children, producing restlessness, fever, thirst, loss of appetite, nausea, vomiting, semi-fluid stools, frequent, greenish, sour; attended with large abdomen, much emaciation, crossness on the part of the child, peevish, and a reduction to early prostration, and if allowed to run into a chronic form, presents a

sallow, unhealthy skin of loose appearance, it hanging in folds or drawn tightly over and around the joints, face peaked, abdomen large and tender, and several stools day and night, usually preceded by rumbling in the abdomen, severe pains; a sudden loud, gushing stool relieves the distress, and the little sufferer relapses into quietude for some time afterward. Many children suffer from this affection, and it is regarded as a very serious condition, and usually proves fatal under the regular method of treatment by physicians, the child wearing out gradually until death closes the suffering. The numerous compounds and astringents, and the carefully selected measures, fail to arrest the disease. Here again we see the magic influence of Osteopathy. The idea of expecting an astringent to pass through the long intestinal tube, and the various mixtures of abdominal and intestinal secretions, to the seat of this affection, and affect the parts involved, seems to us the height of absurdity—and so it is, as proven by results. Where is the trouble from? What does the result have to do in the treatment, when the cause still remains—a separation of the two forces?

THE TREATMENT.

Take hold of the body of the patient on either side of the spinous processes at the dorso-lumbar junction, with the fingers of each hand, and raise the patient thus, the whole weight, keep it suspended for a moment, then let it down; repeat this process two or three times, and then place the hand on the abdomen gently, holding steadily, for two to five minutes, then gently manipulate the bowels and use the vibratory rotary movements of the hands a few moments; then raise the arms, treating from the first dorsal to the tenth vertebra, raising both hands up on either side of the head, lowering them each time, replacing the fingers along down the spine. This stops vomiting. The neck should receive gentle manipulations, beginning with the vaso-motor area.

After the stools are checked, it is a matter of much importance to nourish a patient. It will be remembered that when the skin hangs in folds, the watery portions of the system are nearly all evaporated, and the solid constituents of the body are precipitated. Circulation is therefore sluggish, the skin rough, scaly, dry and harsh, and soreness still present in the ileo-cecal region, the surface perhaps raw and exuding a muco-purulent secretion, and there is need of nourishment. Much judgment is to be exercised now. Begin with warm, sweetened water. Let the child drink or nurse it as warm as it can bear, as much as half



PLATE L,XV.—Showing Plate L,XIV. Continued.



to one pint at a time; let it rest for four to six hours, then repeat the water. Mucilage of ulmus is the best food for a day or two, till the ulcers heal. The water is to be continued at intervals for at least twenty-four hours. Sterilized sweet milk is admissible; also barley and oatmeal mixed and boiled a long time and strained, and the serum therefrom given in proper quantities, but do not feed too much at a time, nor oftener than six hours. Satisfy the hunger by using the water. A bath in wheat-bran water daily will be found an excellent adjuvant to recovery.

It is to be hoped that the case will not run on under Osteopathic treatment until inflammation shall have been established, and the little one emaciated to the extent described above. Then there will not be so much care needed to raise one from the jaws of death. The system must have time to reinstate its lost powers, even after the treatment has united the forces.

CHOLERA INFANTUM.

This is defined as an acute catarrhal inflammation of the mucous membrane of the stomach and intestines. It usually comes on in the summer time, and is common with children during their first dentition, characterized by colicky pain in bowels and loose, watery discharges, febrile reaction and prostration. It comes on suddenly, with vomiting, purging, pains, fever and intense thirst, with rapid pulse, child restless, feverish, irritable, and rapidly runs into extreme prostration; mouth and lips dry, tongue parched, thirsty, cold, clammy sweat, contracted pupils, semi-comatose, and rapidly sinking into a low collapsed state. These characterizations apply to the severe cases, but in milder cases the picture is not so intense. The prognosis is usually doubtful. It resembles the cholera morbus in adults, and requires the same treatment. It is said by one authority that it is caused by "irritation of the sympathetic nervous system." The duration depends upon its severity, constitutional vitality, the character of the attack, and the treatment.

THE TREATMENT.

The treatment consists in bending the body backward gently, with pressure on either side of the spinous process in the dorso-lumbar region, or the lifting of the patient up, with the fingers pressing on the sides of the spinous processes in that locality, or by taking hold of the child's heels and back of neck, laying it

across the knee, bending it gently backward, so that the weight of the child shall center on the small of the back—stretching the mesenteric plexus and the plexuses of the abdomen, and gently pressing and vibrating slowly over the same for a short time. This treatment ordinarily cures at once, in a very few moments. Should subsequent treatments be needed, they should be given in the same way. For the equalization of the circulation and reduction of the fever, should there be any, treat the vasomotor area a few moments in the usual way.

The child should be allowed to nurse as much hot water as is comfortably borne, sweetened so as to be palatable, instead of food, until the stomach has time to rest, waiting a reasonable time after the bowels have become quiet. Let the little patient rest. The mother is generally too anxious to “keep the little one from starving to death,” not considering the ordeal the digestive organs have undergone (exhausted, and needing time to rest). Then do not permit an already worn-down nerve force to be imposed upon ere it has a breathing spell. The water is sufficient for dissolving the solid elements consequent upon watery exudation, and to restore their normal solution, so as to permit return circulation of the molecules necessary to recuperation. Wait, then. Sterilized milk or the mother’s milk will be the diet needed, but not too often.

BLOODY FLUX.—ACUTE DYSENTERY.

This is an acute inflammatory condition of the large intestine, either catarrhal, croupous, or ulcerative in character, with fever, tormina, tenesmus, frequent small, mucous or bloody discharges from bowel. It occurs sporadically, epidemically or endemically.

CAUSES. Sudden atmospheric changes, hot days and cool, damp nights; errors in diet, drinking ice water when the system is too hot, or when fatigued; drinking water from wells and cisterns that is mixed with precipitants, vegetable decomposition, or clay, sand or dirt, without filtering, are attributed causes. Flux generally prevails at a season of drouth, when the springs and wells are scarce of water, much dust flying in the air, hot days and cool nights.

There are several forms of this affection—the Catarrhal, Diphtheritic, Tropical. It is not considered contagious, but is infectious. It is characterized by congestion of the mucor



PLATE LXVI.—Showing How to Extend Pectoral Muscle.

and the submucous membrane, or tissue of the lower bowel, colon and rectum. Constipation usually precedes an attack. The irritation of the mucous membrane by foreign substances may be regarded as the starting point. It frequently comes from a lodgment of a foreign atom, such as an apple-core, in the mucous folds of the rectum; frequent discharges from the use of drastic cathartics; accumulated feces in the region of the sigmoid flexure. Congestion of ever so small a part of the mucous membrane of the large intestine may be sufficient cause to produce sloughing of the mucous membrane and give rise to serious consequences. The disease usually begins, however, with a diarrhea, loss of appetite, fever, nausea, which continue for two or three days, when the mucous discharges appear, with the peculiar tormina, tenesmus, and sick, fainty soreness in the lower bowel, pus and bloody stools, with severe pains in the hypogastric region, especially preceding stool and on movement.

THE TREATMENT.

It is stated by one author that "dysentery is one of the four great epidemic diseases of the world, and in the Tropics it destroys more lives than cholera, and has been more fatal to armies than powder and shot." The magnitude of it may in a measure be imagined. Its various forms signify nothing only as regards tissue involved, stage of the disease, mildness or severity. The treatment must be modified and applied according to the individual circumstances of the case, all things taken into consideration, whether the catarrhal, amoebic, croupous or chronic, and complications attending each variety. All cases should be attended to as early as possible, and the patient should be enjoined to rest quietly in as nearly a recumbent position as practicable, and to avoid mental worry, anxiety, fatigue, and exposure, indigestible food and excesses of all kinds. Keep quiet.

Presuming the patient is reclining on a couch or bed, the operator begins the manipulations by changing the current of the nerve wave by pressing hard and firmly in the region of the dorsal and lumbar junction of the spine, either with the knees or fingers, or, if a person light enough to raise, by placing the fingers on both sides of the spinous processes in that region, and bending the spine forward as far as practicable and holding the patient in that position for one or two moments, then repeating the same process two or three times. The same end may be accomplished by holding the clinched fist of the patient under the back at this region, on the left side of spine, for some minutes, if an adult.

The pressure should be steady, beginning moderately, and gradually intensifying it until relief is had. This treatment may be done by the patient himself oftentimes, with perfect satisfaction and assurance of immediate relief.

The gravity of this disease is such that the tendency is to want to resort to some remedy or compound in the shape of medicine, notwithstanding its almost universal failure. The human mind is so molded by habit, it seems so natural to "take something," that a resort is had to their old ways. When it is once known that Osteopathy, properly applied, cures without doubt, it will be sought by the afflicted, adopted, used.

In this affection, as in all other acute or chronic diseases, due regard should be had to the hygienic treatment, diet, etc. The discharges from the bowels should be removed from the room at once, the sheets and clothing properly aired, the room disinfected, and the body kept cleansed by proper bathing, daily, and the utmost strictness observed in regard to the administration of water. Hot water will be found the most soothing drink, and should be given in small quantities, often, satisfying as fast as possible the waste. Flushing the bowels once a day will be most soothing.

In further demonstration of the efficacy of taking off the pressure from the sympathetic nerve filaments, we will add another treatment that may not come amiss. The sympathetic nerves, as all nerves do, exercise their influence at their end bulbs, and as the filaments that terminate in the lower bowel in this affection are impinged upon, and infiltration of tissue by serous exudate separates these filaments from the terminal motor filaments, increasing the congestion of blood by lessening peristalsis in the arterial walls, a breaking-down of the tissue ensues as a consequence of decomposition of the elements in the parts. The indications are, "Take Off the Pressure." How is this done satisfactorily? We answer, By the bivalve. Divulse the sphincters gently, thoroughly, almost to paralysis, then inject as hot water as patient is able to bear, repeating the injection for several times at the same sitting, immediately after divulsion; and lastly, let a pint to three pints remain in the colon, then leave the patient to rest. This will cure almost every case in all stages of the disease. It is worthy of the most critical consideration and thorough trial. It is effectual.



PLATE LXVII.—Treating Shoulder and Side Muscles.

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TYPHILITIS.

SYNONYMS. Inflammation of the caecum; typhilitis stercoralis.

This is an inflammation of the mucous membrane and deeper structures of the caecum and ascending colon. The painfulness and tenderness in the right iliac region simulate those in typhoid fever, but the bowels are usually torpid, constipated, due largely to mechanical obstruction from accumulation of feces in the caecum.

The characteristic symptoms of this affection are, pain, tenderness and swelling, with some prominence of abdomen in the right iliac region, distension of bowels, meteorism; local pain is peculiarly characteristic. It is very likely to be diagnosed with the condition called appendicitis, but may be differentiated from it by the local prominence manifest in the region of the cecal valve, due to presence of feces therein. While in appendicitis there are pain, soreness, feeling of weight, tense, prominent abdomen and hard swelling in right iliac region, there is not the special prominence in the locality of the caecum as there is in typhilitis. Great depression of the vital powers ensues, proportionate to the tissue involved.

THE TREATMENT.

The patient should be placed on the back, with the hips a little elevated, and the operator should begin manipulating gently on the abdomen over the parts affected, vibrating with the open hand or fingers until the tenderness is somewhat overcome, then deeper and firmer, so that gentle pressure may be made, beginning in the right iliac fossae, pressing upward, following the course of the ascending colon, and across the transverse portion, then down the descending portion, moving the impacted feces forward, onward, downward. Vibrating over whole abdomen from right to left, kneading deeply yet gently, for fifteen or twenty minutes, affords relief at first sitting. The vaso-motor area and the whole spine are to be treated in the usual way, raising and stretching the serrati and intercostales, manipulating the liver, drawing up the abdomen from the iliac fossae as the patient strongly exhales. The intelligent Osteopath will not fail to meet the indications promptly. Flushing the abdomen is urgently recommended in such cases, and would better be done before manipulations begin. The treatment of the splanchnics should be made first of all the treatments. Gentle treatment,

general, should be given every day until cured. The kneading process should always be done with much gentleness and care. Roughness in manipulation is apt to be attended with after inflammation. Too much care in this regard can not be exercised in this or any other inflammatory condition. Toleration comes from gentleness to begin with. The primary object is to first remove the pressure from the lumen of the colon, then to take off the pressure producing the congestion in the walls of the intestine, so as to restore the normal function. These objects are accomplished by this treatment. It is often a matter of surprise to operator and patient to see the astonishing results of this treatment, even when other means have failed.

APPENDICITIS.

SYNONYMS. Inflammation of the appendix vermiformis; perityphilitis.

This is an inflammation of the appendix and connective tissue around and in the vicinity of the caecum (or localized peritonitis), eventuating in suppuration, sloughing or abscess.

The attributable cause of this condition is impaction of the appendix with a foreign substance in the canal. The symptoms are a feeling of weight, soreness and pain in the deep structure of the right iliac region, frequently accompanied with vomiting, tenderness to that extent that the right limb is kept constantly drawn up, to relax the abdominal muscles, in order to relieve pressure. The abdomen becomes tense, prominent, hard, tympanitic; a gradual rise of temperature and pulse, drawn, pinched countenance, indicative of intense suffering. The special tendency of the disease is to suppurate. Pronounced chills usher in this process, and followed soon by high fever and intense pain, throbbing and great restlessness. It is distinguishable from typhoid fever by a lack of prodromes; from typhilitis, by absence of colicky pains, and the tympanitis preceding the presence of the tumor.

As it is expected that the Osteopath will be able to cure this condition without a surgical operation to remove the offending member, it ought to be understood that sometimes a case goes beyond the purview of manipulations, and resort must be had to the knife; but in the great majority of cases, if taken in time, they are curable without surgery or surgical interference—a thing that is perhaps too frequently resorted to.



PLATE LXVIII.—Spine, Liver and Stomach Treatment.

THE TREATMENT.

The attempt should be to speedily arrest the inflammatory process. This usually may be done by the following course of manipulations: Place the patient on the left side in such a position as to relax all of the muscles of the right iliac region, then begin with the vibratory movements of the fingers, as gently as possible at first, and gradually manipulating the deeper structure in that area until toleration is obtained; then have the patient take long, deep inhalations, while the intestines are gently drawn upward and out of the iliac fossae; then, continuing the manipulations over the abdomen so as to remove all the sources of congestion. Next, take hold of the right wrist, and stretch the muscles of the right side upward, thoroughly, strongly, and treat either side of the spine all the way down as the arm is raised and lowered, giving general treatment as indicated for such conditions, same as for other general conditions of inflammations in abdominal region, and be gentle, persistent, patient, thorough. Hot baths, hot water injection, hot local applications should be brought into requisition whenever indicated. The colon should by all means be flushed in this affection. The vaso-motor area should receive attention to control arterial circulation. Much depends upon the care of the patient, the gentleness of the manipulations in a case of appendicitis, as well as in all abdominal inflammations. No rough, bungling treatment should be indulged in for a moment. Discretion, caution, are necessary.

Treat the lumbar area thoroughly.

PROCTITIS.—RECTITIS.

SYNONYMS. Catarrh of the rectum; dysentery.

This means an inflammatory condition of the mucous membrane of the rectum and anus. The symptoms are pain, tenesmus, frequent stools of mucus, pus and blood, hardened feces, an uneasy, burning sensation in the rectum, stools wrapped with mucus, hard lumps passed with much straining and pain, frequently with prolapsus of mucous membrane at each stool. It is generally attended with constipation, enlarged prostate in the male, hemorrhoids, stranguary, and in females with prolapsus of uterus.

THE TREATMENT.

As in all other cases of inflammation, there has preceded it a state of congestion, and decomposition of the elements of the



PLATE LXIX.—Manipulation of Locomotor Alaska.

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blood and waste products are the result. The terminal end filaments of the sympathetic and motor nervous system have been denuded, separated, and an effort on the part of the system is taking place to restore the breach. The pressure still exists. What are the indications? Take off the pressure, send in healthy arterial blood to build up the tissue, furnish it the material. Regulate the circulation of the blood first. Stimulate the spinal nerves, the splanchnics, and treat the liver, stomach; manipulate the abdomen carefully and thoroughly, deeply; divulse the sphincters gently, strongly, gradually; bathe the parts with water hot as can be borne, using it freely with a fountain syringe, ten or twenty minutes at a sitting; then put into the rectum a teaspoonful of bovine after the bathing, three times a day. Bend back in lumbar region, gently, over knees, backward as strongly as patient can well bear for a couple of minutes once a day. Drink freely of hot water, rest quietly, breathe deeply several times at a sitting, and every three hours. Oxygenate the blood. Draw up the pelvic viscera from the iliac fossae carefully, when the patient is lying down and limbs flexed. Use gentle vibratory manipulations over the abdomen once a day at least. Careful and gentle divulsion need not be done oftener than every two or three days. This course will surely relieve the case and cure it in a short time. No medicines are required.

INTESTINAL OCCLUSION.

SYNONYMS. Obstruction; strangulation; invagination.

This occurs suddenly or gradually, and is attended with more or less pain, nausea, vomiting, a constipated condition of the bowels, and resulting in collapse, and death if not relieved. It has been attributed to accumulation within the bowel of hardened feces (an improbable result, truly), foreign bodies, stricture, ulceration, cicatrices, pressure against the bowel, strangulations, invagination, twisting of intestines.

With more or less suddenness of onset, this condition assumes grave characteristics. The site of the occlusion can rarely be exactly determined, but the pains gradually become intensified, tenderness in limited areas over the abdomen, and the stercoraceous eructations become characteristic, the abdomen becoming intensely hard, pulse rapid, feeble; cold, clammy perspiration all over body, cold extremities, constipated.

THE TREATMENT.

It would be useless to recommend the ordinary course of treatment pursued by medical men in this critical situation. It being a physical displacement, it requires physical manipulations to restore a normal condition. Under the old way of treatment it always has been considered a grave condition, but we hope to render it less so before we dismiss the subject. In the first place, the earlier the operator is called to see or treat the case, the more likely the success, or the sooner remedied.

To begin, however, stretch the abdominal muscles strongly upward, extending both arms strongly above the head, the patient lying on the back, with hips elevated a few inches higher than the shoulders, and both limbs flexed on the abdomen, and if possible, have the patient inhale deeply, retaining the air in the lungs for a half to one minute, while the arms are being extended. next, raise one arm strongly above the head, placing the fingers on the side of the dorsal vertebrae; press strongly, while stretching arm taut at the side of the head, and let it down rather suddenly, still holding the fingers hard against the back at the angles of the ribs in the splanchnic area. Now, with the patient lying on the back, with limbs flexed, vibrate carefully, over the abdomen, gradually increasing the force as much as the patient can bear without producing pain, and manipulate in the direction of the ascending colon, following it in its course; then gently knead the whole bowel, drawing it up from the iliac fossae, and use pressure along down the lumbar vertebrae and as low down as the last sacral, lifting all pressure from the nerves along the whole spine. Press gently on vaso-motor area for three to five minutes. Unite the two forces through the splanchnics. Lastly, have the patient lie on the left side and fill from a fountain syringe the colon full of water as warm as the patient can bear, and after it is passed out, repeat again, but have patient retain it as long as practical or possible. This mechanically assists in adjusting intestines. Turning the patient on the stomach or side and pressing against the lumbar region while the limb is drawn strongly backward, or away from body, in a circular-backward move, will be in the line of treatment, and greatly beneficial in adjusting the position of the abdominal viscera.



PLATE LXX.—Showing Treatment for Eye Troubles.

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PLATE LXXI.—Flexing Limb on Thigh and Abdomen.





PLATE L, XI.—Chest Expansion and Spinal Stimuli.



MOTHER'S DEPARTMENT.

INTRODUCTION.

HOW TO CARE FOR THE BABY AFTER IT IS BORN.

The importance of the above heading will never be appreciated by the masses, nor but few of the knowing ones, until it is understood that from *resorption* of the *scurf*, as found to a greater or less extent, on all babies, is the source of more disease in after-life than all other causes, and that even so small a thing as it seems like an impossibility to affect the entire organism of the little being whose budding life we are responsible for, so far as immunity from the contaminating influences of the little things are concerned. Whether the reader may know this, or knowing it believes it, demonstration has shown that this *scurf*, absorbed, lays the foundation for disease; and the susceptibility to disease in all the after life of the little innocent stranger who has come to make us companionship and comfort all its sojourn on earth. The "*milk scurf*," causes a darkening of the *rim* of the *iris*—which shows an effect of the poisoning of the blood, and forms a deposit of the absorbed material which can be seen by any one who will but examine the eyes. Like all other diseased conditions, the *iris* receives its influence and marks the part of the eyes which correspond to the part of the body affected—or even the whole body at once; and this organ marking understood, and its susceptibility to nerve influence, marks the incipency, duration, progress, elimination and dissemination of every morbid influence during the whole lifetime and shows when and where disease is ravaging in the body, and when free from disease, however much conjecture this thought may conduce

to stir up. The foregoing is surely worthy the profoundest consideration—the deepest thought and most careful study.

As simple a thing as the washing a baby has a responsibility about it that has not attracted the attention its far-reaching effects deserve, and we now proceed to give the reader the information necessary to forestall any future contamination of the little one at the very threshold of an earthly life.

The first thing to do with the little one is to use olive oil freely all over the body, head and face, and every part of the body (sweet, not rancid oil), and then, with the hand smear it all over, and with the scurf, and then, with a soft cloth, gently rub the entire body all over, using several clean cloths if necessary, being sure to get all off that is possible at the one sitting; then go over the body again with the same measure as before, and use the soft cloths as before, being sure that every portion of the body is subjected to the cleansing process; between the toes and fingers, around the ears, neck, in the groins, all the creases of the entire body, and finally anoint the body again and gently rub it well with a soft cloth, then clothe it and lay it away to rest an hour or two, then it is ready to be placed at the breast of its mother, after you have washed the nipple of the mother with *warm water* and a soft cloth for a moment or two. See strictly to this method of cleansing the baby, if you want a healthy child. This is better than any number of washings with water. The baby should be anointed after each daily washing, after this first cleansing with the oil. Water should not be used on the body until all of the *milk-scurf* is removed, and if proper care is taken of the baby, daily, it will be strong and healthy and be no trouble to its parents as regards healthfulness.

Every sort of disturbance in the body marks the iris. The one who is perfectly familiar with this delicate organ, and who knows the markings disease makes on it, can positively know the locality and character of effects with a certainty obtained by no other means we know of. It is well to know this science, for then one can be certain of all sorts of influence going on in the body everywhere and at all times, from the mental to the physical influences everywhere, and at all times.

Whether we adopt this or that method of treatment, if we understand what condition we find, we will have the satisfaction of knowing what we are doing, and what for. The arresting nerve waste, stopping nerve-pressure, and "uniting the forces," so as to neutralize excesses of either the one or the other, or freeing the circulation, a la osteopathically, adjusting the spine a la chiropractically, or administering some "anti-psora," or using homœopathic attenuations, or allopathic crudities and poisons; operating for supposed appendicitis, and removing an ovary, the absolute verification and extent of the disease may be definitely known by all who understood how to diagnose from the eye-markings of the eyes.

MAXIMS WORTHY OF SPECIAL CONSIDERATION.

PEACE, CONTENTMENT AND REST, ARE OF ALL TRIPLETS THE BEST.

The best way to be contented is to be busy; always doing something useful.

Spend no time in useless pursuits; never loiter, idling about aimlessly. Let every effort you make tend to be of use in some way to somebody or yourself.

Keep your person clean, think pure, clean thoughts, live a life of purity, and be what you would have the other fellow be. Set the example in all things you do for a model through life, and the world will have been better by your having lived in it, when your race is run, and you shall have gone hence.

Study the best books; always aim high, look up; make straight paths for your feet. Be temperate in all things. Avoid all excesses, and intemperance. Use no spirituous nor malt liquors of any kind. Never use tobacco in any form. Use genteel language, pure speech, never falsify; be truthful under any and all circumstances. Violate no known law, and keep thyself pure.

Late hours, and the attendance upon shows, parties, festivals, keeping late hours, being away from home, in questionable company and learning bad habits, are things which tend to degrade one in his own, and in the estimation of all good people.

The praise of the best people is to be desired above all others. Remember that reputation is what people take us to be, and character is what we are and demonstrate ourselves to be by our lives and our dealings with our fellow-men.

Whatever is worth doing, is worth well doing; and due preparation in mind and heart and training, are of the greatest importance.

Breathe naturally, bathe regularly, eat moderately, masticating the food thoroughly; sleep in well ventilated apartments; observe regular habits as regards attending to nature's calls; eat light suppers; never satiate the appetite at any meal. Eat but few articles at one meal; vary the kinds of food as conditions and circumstances demand.

To sleep soundly, every muscle must be relaxed, and every thought should be dispensed with. Eight hours for sleep and rest is an excellent rule to follow. One hour before midnight is worth three after. Moral, go to bed early; get up early; start early, continue steadily and persevere, and you will get there surely.

A determined effort, keeping the mind steadily on what you do, will be almost always crowned with its accomplishment. Think of what you are doing; fix your mind on it; determine to do it, and if it is worthy your attention at all, it should not be abandoned until every reasonable effort is made for its achievement. Be sure you have something worthy of doing, then do it.

A fixed purpose in life, and an honorable, useful business selected, will not fail you, if persistently followed and rightly managed, and the result will be satisfactory.

TO MOTHERS—THE MANAGEMENT OF YOUNG CHILDREN.

The many cares bestowed upon the little ones seem to demand the entire attention of mothers in the main, and yet the anxiety may be greatly abridged by observing a few little things, which, to most nurses, seem foolish.

First, the over-attention, and constant prodding and teasing and coaxing them to look, to eat, to nurse, and in some way bothering them while asleep, and exhibiting them on all occasions, courting their pride, and fretting them; all these things

would not be done to one older. We would let the older one rest, let them sleep, and not be always putting them on "dress-parade" on all occasions, frequently to the chagrin of mature and older heads, and greatly to the detriment of the child itself.

Rest is an essential element in the growth of the child. After the child is bathed, dressed and fed, lay it down in a comfortable place and let it sleep; being sure to place it in a comfortable position; then, after it lies in one position a little while, say a couple of hours at most, turn it over into some other position. The child should not lie in one position too long, for the reason that the bones of the head are soft and pliable, and may be molded into almost any shape in this stage. Flat headed children are usually made so by neglect of this precaution.

The child should not, for the same reason, be allowed to nurse one breast, lying on the same side, too long, nor all the time, without you wish one side of the head to be larger. A few little things observed, one can see, would make a great difference in the future of the child; perhaps shape its destiny for weal or woe. See to these matters.

THE FEEDING OF THE INFANT.

Where possible, the child should be nursed by its mother, or some one whose condition is conducive to the growth of the child. The mother's milk is the natural food for babies. The child should be nursed when it seems to be hungry, and one should not mistake pain or thirst for hunger, and stuff the child too often. Feeding, or nursing, should not be oftener than two hours while the child is from birth to two months old; then the time between its meals should be lengthened, gradually, to three and four hours, so that, when it is six months old, the space between meals should be six hours, and no piece meals, never.

THE KIND OF FOOD IS AN ESSENTIALITY FOR CHILDREN.

Where it is possible, the mother's milk is the food-par-excellence. After the teeth have formed, and the gums are healthy, a little bread may be soaked in milk, and fed the child, or barley may be boiled thoroughly, and the creamy portion, mixed

with milk, and fed them. Goat's milk is better than cow's milk, but whichever agrees with the child, feed it. The milk should be diluted with water the first two months of the child's growth. Children should not be fed eggs, nor starchy food—if you want healthy, strong children.

The all important thing to be observed, is the vessels used to feed children. Be sure to scald, and cleanse, and air, all vessels used. Never set milk or any other food away for another meal. Let every article of food be fresh; and only mix up enough for one meal at a time. Children would do better not to have any meat until after they are five or six years of age. Cream of wheat, mush, and good oatmeal are good foods for children.

Never over-feed the child nor feed between meals. Give the nervous system time to manufacture the secretions from the blood; in the glandular system, to digest the food; and be sure to give time for that purpose; two to six hours at least. Do not tease nor fret the child after being fed. Let it be quiet, and rest or sleep, and the little one will not need much attention on account of sickness. It will not be sick if properly fed and bathed and rested, with plenty of sleep and exercise.

THE KIND OF EXERCISE WHICH WILL BE PROPER TO ATTEND TO.

Gently rubbing its body all over with the naked hand, greased with olive oil, after its bath, is an excellent way to develop its muscles and improve circulation, and secure rest. Taking hold of the dress below the feet, and turning the head downward, and letting the little one be suddenly precipitated toward the floor, and stopped suddenly—not too hard, of course—will stir up the liver and prevent being liver-grown, and if it is already grown, that is necessary to relieve it; the best thing to do for the child, frequently, any way.

The manipulating the naked body all over, with the palm of the hand; in a rotary motion, a sort of "massage" process, rolling the hand as it is advanced from place to place over the body; always recognizing the fact that the little one is tender, and should be handled gently, carefully, and not have too much

rubbing at one sitting, is the way to exercise it. Once going over the body, including all the muscles on the limbs, as well, should receive attention. This may be done once a day; and is better done, and more salutary, after its bath. If the body is rubbed off with a soft cloth, it will leave the skin soft and healthy.

WEANING THE CHILD.

Mothers make a great mistake in letting the children nurse too long. It not only draws upon the mother, and reduces her to a skeleton, but her milk is non-nutritious, after ten or twelve months nursing. The child should have been taught to eat ere that time, and when it has grown into strength sufficient to live on food it may be weaned.

HOW TO SECURE SLEEP, AND TO PREVENT CHILDREN FROM BEING CROSS.

In the first place, do not spoil them by too much attention at the start. Teach the little one to sleep after nursing—right from the start. Always keep up that habit. If food disagrees with the child, change it, and be sure to let the child have plenty of water—warm water, all it will nurse through a nipple from a bottle, especially at night.

When you want the child to sleep, at night especially, lay it down, in some quiet place. Place sufficient cover over it for comfort, and go away from it, and let it go to sleep. Never rock the child, nor do not carry it, simply because it cries. It won't cry if you do not over-feed it nor spoil it.

Many women rock, sing, pat, pound, and toss the baby to stop its crying; sometimes carry it all night, and keep the light burning to satisfy the baby. Don't do that. Fill the baby's stomach with warm water, sweetened a little, and put it in bed and turn the light out, and let the child go to sleep. Let the mother rest, which she will, when she shall have learned how to take care of the baby as she should.

TEETHING OF CHILDREN.

The first twenty teeth the child cuts are milk teeth, and only temporary teeth. Some children are considerably affected during

the cutting-tooth-period. The teeth begin to show about the fourth to the seventh month, through the gums, and the front teeth come first; and these are called the stomach teeth named so, because the child is generally troubled with its stomach and bowels during the teething period. However much the teeth have to do with the stomach, it can only effect the stomach through the nervous system, and generally the stomach trouble nor the painful teething comes from the teething per-se, but from over-feeding of the child. The kind of food has much to do with the condition of the child.

When the child begins to be cross, fretful, and cries out during its sleep, there is pain somewhere, and generally it is attributed to teething. The mouth should be looked after, and bathed with a weak solution of salt and water; a half a teaspoonful to a pint of water will not be too strong; wet a cloth in this, and wash the mouth of the baby several times a day, and let it have plenty of water to drink—a little at a time, and often.

If the gums seem swollen and the teeth are seen through the skin over the tooth, the best thing to do is to take a coin—a dollar is best—and place the milled edge against the top of the tooth, or where it is trying to cut through; down flat on tooth, and roll it across the tooth-edge, pressing against the tooth; not too hard, nor let the coin slide over tooth, but roll it, and press down at the same. A little dexterity in this matter will save the little one much suffering. If that does not suffice, take the point of a sharp knife, cut down through the skin to tooth cross-wise, then cut lengthwise of the jaw on tooth, and there will be no more trouble with that tooth. Remember the washing of the mouth with salty water.

If there be *spasms*, do not forget the bath in warm water, mentioned elsewhere in this book.

Never give children any cordials nor opiates to soothe them to sleep. Simply relax them with the bath of warm water; place them in bed, or some easy place, and let them sleep, and all will be well. If there be any impaction in the colon, see to that at once; *see about that by all means.* If the stomach has been over-loaded with indigestible food, give an emetic of salt and

water, and remove it. Be sure to carry out the principle, "Remove the pressure."

TO RELIEVE THE DIARRHEA OF DENTITION.

Cease to over-feed, and feed between meals—the first thing you do. Do this without fail. For the indigestion, as some are wont to call it when the bowels discharge thin and greenish-watery stools; all you need to do so far as treatment is concerned, is to take the *child through the treatment for diarrhoea*, mentioned elsewhere, and if you have only a small child to treat, take it by the heels and nape of the neck, and let it be placed across the knee, bearing its own weight against the back for a moment; then hold up, and then repeat a few times; and the diarrhoea is over with. It may have to be repeated a few times. But that is the means to institute for all discharges of the lower outlets of the body. Remember this.

THE TISSUE ELEMENTS FOR THE CHILDREN.

When the child becomes pale and emaciated, and skin wrinkled, the use of *ferric phosphate* is the best element to use, and about the sixth potency is the one to use; in grain doses, every hour or two until all fever is gone, then use the *calcareo phosphate* in grain doses every three or four hours, and that may be alternated with the *kali phosphate* in same size doses, which will be almost tasteless to the child—in fact, it will think it is taking sugar, for the potency is sweet, because triturated with sugar of milk. These are in no sense a drug or medicine, but tissue elements, and if properly applied, fill a niche needed by the child.

It will be of vast importance to the child if the parent will remember that food is not what the child needs all the time. Hot water, given the little one, is often better than food, for the waste material in the body is eliminated better by the use of water than any other agency known. Good fresh air and the proper cleanliness and bathing should receive the attention of the mother or nurse if the health of the baby is of any consideration.

The use of salt bath—one teaspoonful to a quart of water

for children every day, will be the kind to keep the skin soft and natural.

A bath occasionally with the Epsom Salts, a tablespoonful to a half gallon of warm water, will be the proper thing to use in cases of fever, skin eruptions, chigger bites, and sores of the skin, anywhere on the body. There is no more soothing application to the body in cases of fever than the Epsom Salts bath. Rheumatism, and all kinds of pains are relieved by the bath—taken daily, or oftener.

To make a good bath of this kind put about ten gallons of warm water into a bath-tub, and put into that water about two pounds of Epsom Salts, and bathe in that water a few moments—say ten or fifteen minutes, being careful to use cool or cold water to the head at the same time. The above directions followed aid in curing many a condition called disease.

EYE-STRAIN IN CHILDREN.

If mothers could understand that eye-strain is as liable to be found in small children as in persons of riper years, they might find cause for many a case of imbecility, idiocy, and dullness of intellect, slowness of learning, and indifference in many ways.

Look after the interest of the little ones in this respect, and save much remorse and discomfort in the life of the child in after years. Eye-strain, remember, is a source of a host of the ills of humanity, dating from infancy, in very many cases.

Children often suffer with a strained condition of the muscular system of the outer muscles of the eye-ball, and many cases become cross-eyed as a consequence of strain of the extrinsic muscles. The redness and swelling of the balls of the eyes are caused by the nerve strain in the muscle of the outside of the eyes in an effort to focus objects and physicians being ignorant of that fact, let many a case become a chronic invalid.

SPASMS IN CHILDREN.

The first thing to do for them is to wrap them in a sheet or blanket and dip them into warm water (the temperature as to

bearability being as warm as the elbow can bear), being sure to always wet the head in cool, or cold water, letting the whole body of the child be submerged in the water—letting it cover all but the head. After the system is relaxed, and the spasm is gone take child out of the bath, and wrap it in a blanket, or dry cloth, and lay it away to rest and sleep.

This is the best thing possible to be done for the spasms. If the child has eaten food, and it lies in the stomach, vomit it with warm salt and water. If the food has gone beyond the stomach, and is in the colon, use the irrigation tube and warm water injections into the bowels and get it away as soon as possible.

CONJUNCTIVITIS—ACUTE SORE EYES.

In case of common sore eyes, the patient will not need to be told that they are sore. The symptoms are so familiar to all that we need not give them here.

THE TREATMENT.

If caused by dust or sand or foreign substances in the eyes, wash whatever it is, out. Sore eyes generally come from irritation of some kind, and that should be looked after, and removed. The application to them is simply a solution of common table salt—about a tablespoonful in a pint of water, (measure everything you use; do not guess at anything,) and apply to the eyes, externally by means of soft cloths, wrung out of the water so as not to drip. Apply over the eyes—both of them, if sore—and let cloth remain about five minutes, and then rewet and reapply. Repeat this right along until inflammation subsides. Occasionally putting a few drops of the same strength solution of the salt and water into the eyes.

A very soothing and pleasant collyrium may be dropped into eyes, a few drops, made by the addition of one teaspoonful of *sugar* to half a teaspoonful of *Boracic acid*, and mixed with a little water, added in drops, and mixed together in a teacup, with spoon, until it is made into a paste; then add half a cupful of water, stirring with a spoon while adding the water. This makes a harmless and soothing wash for sore eyes, to drop into eyes or

of a teaspoon at pleasure. Keep cup covered and fresh, or in a cool place. Continue the salt water, with the cloths, right along, for several hours; then let patient rest; and reapply if necessary. We have given directions as to how to cure trachoma, or granulated eyelids, elsewhere.

Chalazion may receive the same treatment, as granulated lids, to cure. *Ulcers on the Cornea*, will all *succumb* to *one or two treatments of stretching the upper lid*, for this takes off the pressure, and the ulcer ceases to be painful; stops the dread of light to patient, and the ulcer gets well right soon. The eye needs nothing to it except the salt water solution above named. We have given directions to cure catarrh, by the use of snuffing salt and water up the nostrils. Salt is one of the essentials of life, and should not be lost sight of in the treatment of inflammations of all kinds, anywhere in or on the body. Salt water is the best tooth wash there is, and obviates the necessity of tooth paste, and costs nothing scarcely, and always beneficial, cleanly and does no harm whatever anywhere. Salt is the best remedy for spitting blood; at the time of the bleeding, swallow it right down into the stomach, or snuff it up the nostrils and it will be effectual, satisfactory.

GLYCERINE CURES COLIC AT ONCE.

One teaspoon to one tablespoonful of glycerine taken internally will cure the colic at once. When you have no other means, try this.

TO MOTHERS.

It would not be doing the good mothers justice were we to omit saying something to them regarding the diseases of their little ones, and we submit the following for their special consideration:

The subject is one of the greatest importance; for the child is to be the grown-up individual in the course of time, and all mothers have a pride in the outcome of their children, and especially in their physical welfare, knowing that, unless they are healthy life is filled with sorrow and disappointments innumerable and unsatisfactory. The strong, robust child has a goodly

heritage that wealth is inadequate of comparison. The following advice will be duly appreciated by those who are interested in health. Study the instructions here detailed, as well as the rest of this book, and you will have a fund of knowledge on hand which will be most gratifying when needed.

The commonest fault of parents with their children is to feed them too much and too often. Another common fault is to feed them food that the digestive organs are incapable of digesting. To meet these requirements, we should consider the kind of food the child can digest. The natural food for babies is milk. It should be milk which has all of the elements in it, in due proportion, so as to sustain life and furnish the elements of growth. Carbonates, nitrates and phosphates. These are essential to form the food for infants. If the child does not grow from the start there is something wrong about the constituents of the milk the mother furnishes the babe, and she should consult a chemist and have her milk analyzed to ascertain whether it is natural.

Cows' milk is the next best food for babies, but it should be good, natural milk, containing the normal elements and furnished the baby a little warm, so as to simulate the temperature of the mother's milk as it comes from the breast. In the absence of milk, use Horlick's Malted Milk as first choice, and Mellen's next. The food, whatever it be, should not be given the child oftener than every two hours for the first month or two of its life, and gradually lengthening the time of feeding to four hours until it is six months old; then to six hours after that age. Give nothing in the way of food between meals. Allow no *stuffing*, or *picce-meals*, but let the stomach have natural rest, and the nervous system time to take care of the digestion of the food taken.

The child should not be allowed meats at all until it is at least six years old. The cereals are the food for children. The best being barley and wheat; well cooked and eaten with milk or a mixture of cream and milk. After the teething, when the child has its teeth, see to it that it learns to chew its food. This develops its salivary glands.

Whatever is found, in the way of vegetables, which agrees

with its digestive organs, may be allowed, after it has been taught to chew its victuals. It is worth while to teach the child how to eat right at the start, then there will be but little fear of stomach, or any other trouble in after life. Health is dependent upon how, and what we eat, and when we eat.

The parent should study the nature of the food, by consulting the table of articles of diet, their elementary, chemical constituents, and feed what agrees with the child. The results of eating depends largely upon the kind of food eaten, as regards elements needed in any given case or condition. If we need fats we should eat food containing fats; if muscle, food containing nitrates; if we need to build up the nerves, let them eat what contains the proper proportion of the phosphates.

Some children are born with a shrunken skin and completely exhausted; seemingly doomed to mortality as soon as born; enervated, emaciated, marasmic, and in the majority of such cases, die soon. These need special attention at the start. They should not be wearied for some time after birth with bathing. Anoint such all over with olive oil, and lay it aside for a couple of hours, and let them rest; then gently rub it all over with a soft woolen cloth, and then let it rest again; feeding it with a little sweetened water, and within three or four hours let it nurse the breast. It requires much care in such cases that it be not exhausted further by doing too much for it. Lay it on its right side and let it rest a reasonable time, then feed it; let it nurse if it seem eager for food. The first nursing from the breast is nature's physic, and will remove the *meconium*—the green discharge from the infant's bowels.

The nursing of the mother's breast causes uterine contractions and pain of the mother, arresting the lochial flow for the time being, and sometimes serves a better purpose than any other means to expel the "after birth" as it is the natural course and the natural hemostatic. (Stopping the flow).

Do not feed the child "panada," but a little warm sweetened water is the best for it. If there is not sufficient mother's milk for it, substitute the warm water with cow's milk mixed with it. If the child has any symptoms of "Three Month's Colic"; fill a pint bottle with warm water, add a little sugar—grape sugar

is the best—and fit on it a nipple, and let the child nurse all it will of this, and it will answer every purpose, relieving it at once; and if given to the child at bed-time, it will afford a quiet, restful night, not only for the child, but for the mother, and the whole household for that matter.

This should be used every night at least, and oftener will be of much benefit, for it will keep the bowels regular and promote digestion, and supply the entire system with water. Most all children suffer for the want of water. They should have water frequently. Only the water which is nursed through the nipple should be warmed. Give cold water in small quantities to the little one several times a day, and you will find that the baby will thrive and be healthy all the time.

The warm water as an internal bath should receive attention. Children sometimes are permitted to eat unwholesome articles of food, such as bananas, and have colic. Nothing answers the purpose of relief from such conditions as the warm water, colon douche. Every family should have a fountain syringe, and nozzles of varied sizes, and the nozzles should have *holes*, or perforations, *on the sides, near the end*, and the *end hole plugged* up tightly, and thus permit the water escaping through the side holes and the inlet is not felt as it enters the bowels, so that the entire colon can be filled when desired. There is frequently a necessity of washing out the entire colon, and no better way can be devised than the use of this method. It will relieve any impaction, and nothing else is so effectual in relieving that condition we denominate Intussusception, or that condition known as *enfolding* the intestines in such a manner as to close the passage. It is an invagination of the intestines in, and over themselves. Plenty of the warm water injected into the rectum, and filling the colon full, and letting it go on into the small intestines will expand and relieve the invagination. The bowels should be gently massaged—manipulated—to assist in their movements, and performing their peristalsis.

THE USE OF WATER—WARM WATER IN CASE OF DIARRHEA AND FLUX.

Children would have neither diarrhea nor flux, were they not stuffed with everything that is in sight; or that is thrust upon them—into their stomach—perhaps to stop their crying, (and their crying is the fault of someone else and not the child's fault, most frequently). If, therefore, the child has too frequent movements from the bowels, there may be relief in one or both of the following ways: either by taking hold of the child by the lower limbs, with both ankles in one hand, and the other placed at the back of neck, in such a manner as to hold it, at will, and where you should; and now let the child be placed with its *loins* or small of the back *across* the knee, and its head and limbs lowered, bent back pretty well, and bearing its weight on the knee, and hold in that position a moment; raise it up and let it rest a moment, and then repeat process a time or two, and then press gently with the hand against the abdomen a few moments, and the child is cured of the diarrhea.

FOR FLUX.

The treatment for flux requires something more, sometimes, than the above. It is best, in all cases of flux to relax the internal sphincter muscles of the rectum; and the best way to do that is to anoint the forefinger with oil and insert it into the anus far enough to feel that it is through the constricted portion of the bowel, and then gently, steadily and firmly, pull the finger backward toward the coccyx, giving the sphincter quite a good stretching, not enough to tear the parts, but stretch them till the muscle seems somewhat relaxed, then remove the finger at once—quickly, and let the patient rest a few moments, then inject as *warm water* as *can be borne by the patient*; filling the bowels quite full of the water; let that pass out, and in a few moments repeat the injection of water. Doing this from two to four times all at one sitting, and then let the patient have rest in a recumbent position. After a rest of an hour or two give the osteopathic treatment for diarrhea recommended in another

part of this book—that is, treating the spine—from the lower lumbar vertebra upward; raising the limbs, strongly pressing on the sides of vertebra while raising the limbs, with thumb and finger to sides of vertebra. This may be repeated several times at the one sitting, and repeated every four to twelve hours. This procedure generally cures the flux. The diet, if any, should be thickened milk, eaten while hot; or hot milk alone. The stretching of the lower bowel is for the purpose of relieving the pressure therein, which chokes the blood in the veins, and causes the exudate of blood or pus. Relief is as certain as the directions are followed to the great satisfaction of all concerned.

FOR MANY SUPPOSED CASES OF CONSUMPTION—A BAD COUGH.

Many such conditions may be absolutely aborted by the daily flushing of the colon with warm water. It will be a satisfaction to know that this is the best tubercular remedy there is. It is the best remedy for appendicitis. It is the best remedy for impaction and the only remedy for it. Thousands of cases, which proved fatal from other means, might have been cured by this method, and we hope this measure will be the means of relieving thousands whose lives are in the balance from that condition, called impaction. It can do no harm, and the immediate relief is so satisfying that it should receive the profoundest consideration. We have had much experience along these lines, and recommend the irrigation of water—the flushing in all suspicious cases.

CIRCUMCISION AND ITS NECESSITY.

The necessity of looking after congenital conditions of the little ones to prevent them from having to undergo the consequences of such neglect demands our attention, and we would be withholding an important item from the mothers and from the little ones were we to leave out of this book what follows.

SPECIAL ATTENTION TO THE GENITAL ORGANS.

Every child born into this world is entitled to special consideration as regards their starting right physically; for, without

health, life is scarcely worth anything to anyone. The little things in life make up the sum total of happiness or misery. It is said by a wise man, that "words fitly spoken are like apples of gold in pictures of silver." We desire to thus speak to the parents in behalf of their little ones.

The lower outlets of the body deserve special consideration.

THE IMPORTANCE OF ATTENTION TO THEM IN TIME.

Some children come into this world having some abnormal condition of their genital organs. The most common, is an elongated foreskin, in the male, and a bound-down clitoris, in the female. These need attention and correction as soon as discovered. The attention needed is circumcision of the males and clipping the hood of the clitoris in the females. Much depends on these things being done, in all cases where needed. The need is in all cases where the above described conditions exist. The *enervation* resulting from conditions named causes a large percentum of the weaknesses of the sufferer in after life. Undue pressure, anywhere in the body, on terminal nerve fibers, cannot be allowed to continue, if we desire health. Nerve-waste expresses itself in various diseases and mental depression, mental degeneracy and physical weakness, and finally wreckage of the entire nervous system.

The necessity of taking off the pressure from every filament of the nervous system has been shown in the Neuropathic department of this book, and it applies with equal force to the terminal nerve fibers in the outlets of the body.

Many nerve wrecks may be attributed to the neglect of attention to these organs. An elongated *prepuce*, and a bound-down *clitoris*, cause more physical wrecks than many have any conception of. Next to nerve waste through *over-use* of the *eyes*, may be found in the waste due to a *tightened foreskin*, a *narrow meatus*, a *contracted glans underneath*, due to a shortened *bridle*, and to adhesion of the mucous membrane to the *glans penis*.

We would emphasize these facts greatly, for we know their importance in the welfare of the future lifetime of the one not natural in these particulars. Always consult one who knows how

these organs ought to be, and be sure to have them righted, if wrong.

We have seen marasmus cured simply by circumcision. A case of diarrhea—chronic for six months, cured by circumcision in a short time. We have seen venous congestion, in an infant of four weeks old, cured at once by enlarging the meatus, after all medical means had failed. We have seen young men, who had been weakly all their early manhood rapidly assume a normal condition and become stout, healthy men. We have seen cross, irritable, sickly persons restored through the means recommended. Whenever there is found to exist an elongated foreskin do not fail to have it removed. The entire covering of the corona need not be removed, but sufficient to render the head of the organ bare—back as far as the glans extend. In other words, remove the pressure upon the nerves involved. This acts on the same principle as dilating the sphincter ani; it removes the tightened condition which presses on nerve terminals—and thus relieves.

Some one will ask, "How old may the individual be when this is done?" We would recommend it in infancy, and any time from that to old age if necessary. It is proper at all times, and for all conditions of ill health, to relieve, to take such steps as are needed to correct the unnatural conditions existing, which cause the trouble. This recommendation is directly in line with the principles of Neuropathy. The whole trouble with most people is they are so wedded to relying upon medicine, that they do not stop to think that almost every condition called disease may be relieved by following the instructions contained in this book—for they say it differs from the way we have been taught. Give the subject due consideration, and the more you practice what is recommended herein the more it can be relied upon. It will satisfy the most incredulous when properly applied. Depend upon it without a doubt; for it is the best means of relief known.

HOW TO MAKE A SUB-CUTANEOUS STITCH.

In very many lacerations or cuts with a sharp instrument, the surgeon resorts to the needle to coapt the wound; and this

is sometimes the best thing to be done; but when it is to be done, we would suggest that the stitches be made in the muscle, just at the edge of the skin; taking deep enough stitches in the muscle, from side to side, to hold the parts when the stitches are drawn together. After the sub-cutaneous sewing is done, the skin may be coated nicely with surgeon's plaster strips cross-wise of the wound. If the stitches are made with cat-gut thread, there will be no scar, as a rule, following. After all is done, and the wound closed, wet a small pledget of absorbent cotton compound tincture benzoine, and lay it directly over the wound, and letting it wet to the skin. This applied once a day will serve as a disinfectant, and at the same time exclude the air from wound.

All sorts of cuts may be served the same way. The stitches, taken as described, cause no pain whatever, to the patient; and this method should be adopted whenever possible, for circumcision, and all other such wounds. Small wounds, not too deep, may be held together by moistened absorbent cotton, wet in the Compound Tincture of Benzoine, and spread across the wound. It will hold it together if allowed to dry a little before leaving it. These hints may save much pain unnecessarily made by sewing through the skin.

WHAT TO DO FOR BRUISES AND CONCUSSIONS.

Frequently a bruise resulting from a stroke of a hammer or otherwise, on a finger, may be a source of much discomfort unless the bruised blood be immediately discussed.

To remove the congested blood, wrap the finger from the hand toward the end and to the end of finger, with a twine, somewhat tightly and the twine wrapped close around the part but not tight enough to obstruct the arterial blood but tight enough to prevent the venous blood from returning back, and let the wrapping remain until the end of the finger is quite dark with the venous blood, then immediately unwrap it and rub the finger toward the hand for a moment or two; then repeat the application of the cording and do as before, doing this two or three times, and you will have discussed the blood which would have been bruised and black for days. Then apply quite warm water for a little while afterward.

Concussions apply more directly to the head, and done by hard blows or falls on hard pavements, floors or other hard substances. Fracture of the skull may result, or simply a contusion result. In either event, the circulation of the blood all over the body may be interrupted, and a difficulty of breathing ensue, or death may result at once. The thing to do is to establish the circulation of the blood as quickly as possible. To do so, divulse the sphincter ani muscle strongly, and by sudden, quick dilations so as to gradually shock the system, and flush the capillaries. When the breathing is restored, apply quite warm water to the parts, by the uses of cloths or towels wrung out of the hot water until the discussion of the blood from the part bruised is swaged. These are the essential things to be done,—immediately, or as soon as possible. We have mentioned lacerated wounds in another article in this book—which see.

WHAT TO DO FOR CHILDREN WHO HOLD THE BREATH.

The simple things are of importance to know and do—the harmless and effectual thngs. Children whose control has been neglected by their parents until persuasion with the rod and promises of special gifts as a reward for obedience, have all been unavailing, and through a fit of anger, due to over-indulgence in its own way, falls down to the floor and holding its breath—even until it turns black in the face—there is a remedy which never fails to bring about a calm and serene atmosphere in that household. It is simple, but as certain as it is applied, and immediate, satisfactory and never need to be repeated. It is this: Insert the forefinger into the rectum past the internal sphincter muscle, or as far as the second joint of the finger, and begin to pull backward toward the coccyx just enough to stretch the opening as much as the width of the finger, and the work is done. The child immediately catches the breath, and it will never attempt such a thing again.

A good spanking on the naked nates is sometimes effectual, but a divulsion of the sphincter ani muscles is sure of success. I would add right here; some older persons are troubled with despondency, melancholia, and seemingly an inability to breathe, although there seems to be no reason as far as the condition of

the atmosphere is concerned, and yet they cannot feel disposed to want to breathe, or that it is almost impossible to get the breath. Using the forefinger inserted into the rectum, and pulling it strongly backward, stretching the muscles strongly, affords relief immediately. This is also the remedy-par-excellence for all cases of hysteria. The finger answers the same purpose as the bivalve, and you always have the remedy with you, and can regulate force according to the necessities of each case and condition.

THE EARLY TRAINING OF CHILDREN.

The special oversight of children as regards their forming bad habits is a matter too sadly neglected. It is often a sad ending of the boy or girl who forms bad habits while climbing the slippery paths of youth, and many a young man has just cause for rebuking his parents for not warning him of the evil consequences of Onanism. They have just cause in many instances, for regret that their parents did not teach them how to avoid forming habits which, like a viper had fastened their venomous fangs into the very heart and stung them like an adder, and ruined every prospect of usefulness; sapped the very foundation of their manhood, and left them to brood over their sad fate. Is it not worth while to consider this subject when so much of the after life of the youth depends upon it? Teach the child what their genital organs are for, and that they are not play-things.

The hideous picture of a ruined life beggars all description. The sad wailings of ruined youth reach the very gates of heaven, and reverberate with doleful lamentations adown the ages, and if this warning saves the youths of the readers of this book, we shall be glad we had lived to bless them. Parents, see to it that your dear ones have their minds instructed as they should be along these lines, for a sweet and virtuous life is the proudest character parents can bequeath their children. As is the family, so is the nation, and as is the nation, so ought the world to be, and will be, in this regard. "Lust when it hath conceived bringeth forth sin, and when it is finished it bringeth forth death," was said by one who knew all things. A moment's pleas-

ture in the gratification of lust, breeds shame and if often indulged in, ends in inexpressible remorse.

EAR-ACHE—HOW TO RELIEVE.

There are many simple things, which seem so simple that their usefulness is too often disregarded, for the mind is seeking to find some great things, or something made popular by time-honored custom, and traditional descent, and the very thing which might answer a better purpose, cost less, and do more good, is neglected. Now listen, study, read this.

The ear-ache is no trifling matter when it takes hold on us. It surely hurts, and hurts badly. If it is so distressing to the reader, may it not be as much so to the little ones?

Now to relieve it. Place a silk handkerchief, one or two double, over the ear that aches, and with the warm breath, blow gently into the ear through the handkerchief, several times, and you will accomplish for the sufferer, more than any other means you can devise. Warm, dry heat should be applied if there is pain from inflammation, till relieved, not forgetting the warm breath, as above directed.

ABOUT WASHING THE EARS WITH WATER.

The ears seldom need the application of water in them. When they, through neglect, are stopped up with cerumen, (ear wax,) pour a small quantity of olive oil into ear, with a teaspoon, and place a pledget of absorbent cotton, loosely, into the meatus, over the oils, and let it alone for ten or twelve hours; then, with a fountain syringe, let the water run into the ear—(do not have the fount so high as to make too much force to the stream of water,) having a vessel held under the ear to catch the water, and the water will clean out the ear thoroughly—impaction and accumulated filth, and relieve the patient of much discomfort, and very often, temporary deafness. Remember this is important sometimes. To dry the ears thoroughly, after the irrigation, is important. Use dry, absorbent cotton wrapped around a small stick—the end of which has been notched, wrapping the pledget of cotton around it, by placing the small bit of

cotton on the other hand or held between the fingers, placing the stick half way through the pledget, and then twisting the stick to the right till completely wrapped—doing the pressure on the stick—leaving a part of the cotton to extend beyond the end of the stick. This leaves a soft end of the cotton to go into the ear, and saves the pressure against the ear drum, but reaches to every part of the ear and absorbs the water. There should be a repetition of the use of the cotton in order to dry the parts completely. After the ear is dry, put into the ear a small pledget of cotton, having patient retain it for several hours. This is to prevent taking cold after the warm douche. This does not need frequent repetition, for the ears may be kept clean by the use of the cotton used on a stick, or a notched end of a match, (cutting off the sulphur).

These simple directions followed, may be utilized by any and all who need them.

HOW TO REMOVE FOREIGN SUBSTANCES FROM THE EAR AND NOSE.

It seems to be a desire of some children to want to be as annoying as they can be.

A suggestion *not to do* a thing seems to create an intense longing to do it, and it is best not to suggest to children that they do not stick beans or corn into their nostrils or their ears, for everybody seems to incline to experiment, and a little knowledge is a dangerous thing. If parents would fully explain the consequences of doing the wrong thing and thoroughly impress them that parents should be obeyed, they would be satisfied; but if a suggestion is made that "thou shalt not" it will require a good deal of moral courage to withstand the temptation. But if the child persists and decides to make the experiment, and when you return from church, or some other place, and find your child's ears full of beans, corn or rice, or gravel, be prepared to extricate the substance in the easiest and the best way possible. The child will not take the treatment for their removal as submissively as when poking them into the orifice. If you go at the task of removing the corn, beans, cherry-stone or any other substance in the ears, with any degree of rashness or awkward-

ness, so as to create a suspicion that you are going to hurt, you will have stirred up a faculty just above the ears, called destructiveness, to expressing itself in terms that, for vehemence no tongue can ever describe. I have had experience along these lines. Mark my words, and be sure to consider my advice. You will regret it if you do not. Be careful what you do, and how you do it. It is a matter of importance.

The easiest and safest way to remove hard substances from the ears is to secure a small stick that will enter the ear easily, and take a strong piece of cloth and place it over the end of the stick, fastening the cloth back, leaving room to place a small amount of glue on the end of the stick—on cloth, just the end of it—and then place that against the object in the ear, letting the glue adhere a few moments, and it will enable you to pull the substance out easily. This is the best way; but sometimes a hair-pin can be introduced to the side of the object and it removed therewith, and sometimes water may be used to wash it out. The water is the thing to use for flies or bugs in the ears. Sometimes the object may be hooked out with a small sharp hook, but care should be had in any event so as not to injure the parts.

There are so many little things get the matter with children that it would take a large volume to enumerate them. The artful mother will find her ingenuity often taxed to know just what to do many times, but should always have her quiver well filled with missives which she may need in emergencies.

The above instructions should save much anxiety and much cost in the way of doctor's services and expenses thus incurred, and much suffering and long spells of sickness.

STARTING THE YOUTH AND TEACHING THEM TO SHUN EVIL INFLUENCES.

Life is so precious that it should demand our first and highest interest, early, constantly and intelligently. To be forewarned is to be forearmed, and to know how to be wise we must be ever ready to receive instruction. Were we inclined to go through life heeding the advice from those who know by experience and observation, of those who have grown older than

we, much anxiety and many heartaches might be avoided, health preserved, and many who suffer a lifetime might have escaped the pitfalls of vice, immorality, and saved of being physical wrecks—addicted to habits which tend only to wretchedness, disease and death.

Parents should not be remiss in early admonition of their children regarding bad habits, unchaste associations, evil communications, obscene literature, novels, trashy stories, and such influences as tend to educate children and youth in paths of vice, and poison their minds with the history of crime, luxury and foolishness, ever remembering that Scripture which says, "Blessed is the man that walketh not in the counsel of the wicked, nor standeth in the way of sinners, nor sitteth in the way of scoffers, but his delight is in the law of Jehova; and on his law doth he meditate day and night." Such a course will forever shield the youth from falling into or adopting bad habits.

We have said thus much as an introduction to what we have to say regarding the care of our youth, upon whom the future of this nation rests, prospectively, and its importance cannot be over-estimated, nor its far-reaching influence measured; for "whatsoever we sow, that shall we also reap." Then be sure of sowing the right thought in the mind of the youth; for, "As a man thinketh in his heart, so is he." Analyze these sayings and be guided by them *remembering that children only know what they learn*. Teach them rightly and they will be guided by what they are taught all through life and verify the instructions given in holy writ, which says, "Bring your children up in the nurture and admonition of the Lord, and when they become old they will not forget the instruction."

If there were no tendency in man to go away into sin from his mother's womb, there would be no necessity to charge the parent with the care and oversight of the offspring; but he being under "Tutors till the time appointed," it behooves the tutors to always be on the alert for the welfare of the child.

See to it while you have the little ones under your charge. Allow nothing to divert your mind from this solemn obligation you owe to your child. Do not think that "my child is too perfect to think of such things, and that he cannot do wrong."

There is no one above temptation along these lines—"The desire of the flesh" is one of the three ways to sin—and it begins at the very dawn of our physical life, and we need teaching so as to know why we are thus created, what the uses of our organs are, and how not to abuse them, nor any part of our body. Every organ has its specific uses, and when one is unduly exercised, the whole body, sooner or later, sympathizes with it and emaciation and many unnatural consequences ensue; and the constitution suffers all the balance of the natural life of that individual. If, therefore, you desire strong, healthy, *sound mentality* and a start in life for your dear little ones, see to it that you keep them from learning a habit that is so sure to be their downfall and physical wreckage.

The abuse of the genital organs should never be allowed. It saps the foundation of all nerve forces which make manhood and womanhood attractive, bold and strong. Nerve-waste through the genital organs, affects the mentality, sooner or later, and makes its victim a physical and a moral wreck and stultifies all decency and self-respect, and renders many a would-be manly man and womanly woman an absolute failure in life, and damns them for all of this life and perhaps for the world to come.

The emphasis cannot be too strongly placed upon this subject, nor can parents be too careful in absolutely knowing, at all times, what their children are about, who they associate with, and what their training is.

Consumption could be avoided if the children were taught how to preserve nerve force, and how to eat, breathe, sleep, and exercise properly. Life may be prolonged by properly caring for the body and the right teaching of how to think and act toward our fellow-men.

Teach your children to "shun every appearance of evil," and they will be the beneficiaries—the world will have been better by their having been born and lived in it.

Your child's life will be a failure if you neglect to teach him, in early life, how to live and what his relationship to the rest of humanity should be. "A sound mind in a sound body" is a gem worthy our highest and profoundest consideration, and then we will have a better conception of our responsibility to

Him who has so wonderfully created us, and what our physical and moral obligations are to Him (as well as our religious obligations).

Teach the child to regard the *private parts*, of the body, with due respect, and not to abuse them, by compelling them to perform any unnatural duties, nor to use in excess any organ; for, upon the healthful condition of every organ depends the health of the entire body. The sympathetic relationship of the body is such that if one member suffers, all the rest of the body suffers also; therefore, every part of the body must be duly respected. If the eye is over-used the body suffers from general emaciation, sooner or later, and disease of some kind is almost sure to follow. If the genital organs are abused, or used to excess, the nervous system becomes exhausted and general emaciation takes place, with all its direful effects; and if a habit of abuse is established by over-use of the genital (the private) organs, the effects are seen in the face, in the eyes, and the *mind becomes weak*, irritability of temper, crabbedness, cowardice, leanness, shrunkenness of the muscular system, glassiness of the eyes, and a shamefacedness takes possession of the individual; and sooner or later death, with all the horrors of a maniac closes the scene. For the sake of the child, for the sake of the fond father and mother, for the sake of the community in which the child lives, and for the good name of all that is sacred, holy, just and good, do not neglect to care for the little bud that may be blasted forever by your neglect; take warning; regard not the instruction with any degree of diffidence nor shamefacedness on your part; but *get right next* to the very heart and in its confidence and deep soul interest, make your child a confidant of yourself, and tell it how to be good, pure and happy, and healthy, manly and womanly, all through life. Teach the young child "*the way it should go*, and when it is old it will not depart from it"; and your days will be blessed, and the child will "live long on the earth" to bless humanity, to bless you, and to thank you when grown up that you said the right things at the proper time; and this world will have been better by your having lived in it, and your children will rise up and call you blessed.

If but one family shall take this advice this book will be worth to that family more than ten thousand worlds like this, and save a great multitude of sins being committed. Let the motto of the youth of this generation and all that follow be, My associates must be pure, clean inside and out, or I will not associate with them.

The boy or the girl who obeys and respects parental advice is only worthy of respect.

MEDICAL DEPARTMENT.

When we consider how long and ardently we studied medicine—the various theories—first, the Botanic, then the Eclectic, then Allopathy, then Homeopathy, and all of the mental and physical sciences, including Osteopathy, Chiropractic, Ophthalmological, suggestion, and many other side specialties, we learned that disease could be traced to three conditions: first, *invasion*, second, *retention*, and third, *enervation*. This we learned through the literature of Dr. W. H. Burgess, of Chattanooga, Tennessee. So far as any medicine system is concerned we think his system the most plausible. Outside of nerve pressure, and nerve enervation from over-use, there is, perhaps, not a system of medication fraught with more certainty of favorable results. The principal and most potent remedies he uses are the simplest kinds and easily procured. There are a few things recommended by the doctor worthy the consideration of every one who desires to use medicine in any form we feel no hesitancy in recommending. His books are certainly unique and full of sound reasoning and practical common sense. His preparations are on the specific order, and for many conditions there is nothing better, in our humble opinion, for some of them we have tested to our entire satisfaction. Those who want to know his system can learn it by purchasing and studying his books. The book entitled the "New Field," and the one "Chronic Diseases," will be read with great interest by those who desire to know how to successfully practice medicine.

The medicines are put up in convenient form and not costly, and they get right to the work of neutralizing the toxins, removing the *retained poisons*, and *toning up the nervous system*. It will be an "eye-opener" to the medical practitioners everywhere. We have a method of our own in the treatment of disease, and so far as manipulations are concerned there is none better, and curative of all functional human ills; but *some people want medicine*, and to such we recommend *getting the best*, and the *least harmful*, and the *most effectual* for meeting the emergencies, and *curing certain conditions*. That there are agencies in the way of medicine which are useful we hesitate not to say and believe that common sense should be exercised in all things, and that *nothing* should be *withheld* which is harmless, that *will ameliorate the conditions of suffering humanity*. We cordially recommend all that *is needed to relieve suffering humanity*.

For neuralgia.—Spread on one side of a piece of cloth with the white of an egg, and sprinkle black pepper on it till black (with the pepper), and then apply on the affected part. If in the head, place it on the temples and back of the ears.

For headache.—Cotton wet in tincture of camphor, and applied over nape of neck and over top-side head, bound on, cures by one application generally.

For heart trouble: pain in and around it.—Wring cloths out of hot water in which mustard has been added, one tablespoonful of mustard to a quart of the hot water, stirred well, and wring cloths moderately dry, and apply them at the pit of the stomach and over the heart where the pain is.

Diphtheria.—One teaspoonful of tannin, one teaspoonful of pulverized alum and one teaspoonful of sugar, mixed all thoroughly together; and then hold the tongue down, and with a quill, or a paper, rolled so as to be able to blow a quarter to a half a teaspoonful into the back part of the throat, once in five to six hours—and repeated that often if the disease should return.

Lockjaw, to cure.—In cases where there is seeming rigidity of the muscular system, if there is bound on the pit of the stomach and under the arms moistened tobacco (the fine cut preferable) will relax the system, produce vomiting and aff

speedy relief. Warm turpentine may be poured into the wound if there is one.

Appendicitis.—Cloths wrung out of hot water, and a few drops of turpentine sprinkled on and applied to the lower abdomen on the right side, will usually be efficacious in relieving.

Vomiting, to arrest and cure.—Wring cloths partly dry out of cold vinegar, and apply to the neck, and place a mustard draught on the pit of the stomach.

For suppressed urine.—Apply cloths wrung out of hot water and apply over the bladder; repeat if necessary.

To cure croup.—Fat bacon sliced thin and applied to the throat and upper part of the chest cures croup. So will cloths wrung out of cold water and applied to the throat, and repeated every few moments. Soon cures the croup.

For sore throat apply the cold compress to the front part of the throat, and wrap a dry towel outside of the compress and go to bed, and let compress remain all night; when up, take off the cloth and wash throat and neck in cold water and wipe dry.

Another for croup.—Apply to the throat cloths wrung out of coal oil, and at the same time give a few drops, say four to twenty, on a little sugar every half hour till relieved.

Constipation of children: to cure without medicine.—Apply olive oil all the way down the spine, repeating it three times a day, and also apply the oil around the posterior and sides of the body just below the ribs as far as around to the sides of the body. This is usually effective in a few treatments.

To cure chills.—Apply a mixture of equal parts of turpentine and chloroform on back of the neck, and on down the spinal column, along the spines, and across the small of the back three times a day. This is simple though said to be effective.

**TO DO THE RIGHT THING AT THE RIGHT TIME—THE RESOURCEFUL-
NESS OF THE OPERATOR.**

In the treatment of the various conditions called disease, it is well to have various resources to draw from in order to meet the special demands at the time so as to render the needed service for the given condition.

In medicine we have certain kinds for given conditions and these constitute the curriculum of specifics, as it were, and the routinist having tried his specific for a given condition and failed to obtain relief, his limit is reached and he improvises other means. If these other means fail to meet the demand, he tries others. It should not be so in the application of this science; for, understanding that the nervous system is *always* involved in disease, the practitioner should be at no disadvantage in applying the remedy indicated in any and all conditions found to exist.

TAKE OFF THE PRESSURE—STOP THE WASTE.

The above heading includes all there is to do in any and all conditions called disease. It should never be forgotten that the nervous system expresses its power at its endings. If there is pain anywhere the nervous system ending there is impinged between that particular locality and the brain, and the thing the physician should do is to release that impingement; then he has done all that can be done, and as soon as the harmony is restored, cessation from pain may reasonably be expected.

Whilst we may have general contraction all over the body and some severe pain in a particular locality, as, for instance, severe headache, we should not fail to proceed to institute measures to relax the whole body. This may be done by the use of very warm water—by means of saturated cloths wrung out of and applied. If one has pain in the lungs it is evident that the chest muscles are contracted and drawing the ribs down against the pleura, impeding the circulation of blood in the lungs. The remedy is to take off the pressure. This may be easily done by raising the clavicles and strong extension of the arms, and the spinal adjustment at the fourth dorsal vertebra.

If there be colic, due to too much gas in the stomach, relief is usually obtained by strongly extending the right arm and pulling strongly with the fingers against the side of the spine, and then, while the arm is extended, push the arm strongly backward and holding it there a moment. The pain ceases as if by magic. Or placing patient on the stomach, bolster or quilt folded under the upper part of the breast and another under the pelvis, making a space under abdomen where it may be free, and then

treat the seventh and eighth dorsal with a strong, quick movement. The colic goes at once.

For flux and diarrhea the same sort of treatment should be made, with the treatments from the hips upward to the middle of the back, treating at intervals of an inch or two. For the flux, we have given the treatment elsewhere, which see.

In all of the osteopathic treatments we recommend in this book, we would urge that the neuropathic treatment in the back, from the fourth to the eighth dorsal, be given also; for the union of the two forces assists greatly in neutralizing the poison or excess of either the acidity or the alkalinity of the fluids—blood, as well.

Some cases will not be satisfied unless you recommend some domestic or other remedy to take. As to that matter, use your own discretion, for there are many things useful in nature and the only caution needed is, be sure to introduce no *poisons* into the system. Even the simplest things foreign sometimes have deleterious effects.

FOR LOCAL BLOOD POISON USE THE FOLLOWING.

Make a *poultice* of *wood ashes*, mixed up *with coal oil*, and apply to the part affected, and change same every four to six hours. This is almost a specific in any stage of the poison. Another, recommended by a noted physician, is a solution of quinine applied to the part for a day or two. It is said to cure in twenty-four hours.

FOR APPENDICITIS:

Flush the colon with warm water, adding a teaspoonful of salt to a gallon of water; use the long, flexible rubber tube, well inserted into the bowel—as far at least as past the sigmoid flexure—and use as much water as patient can comfortably bear, retaining it for fifteen or twenty minutes and then letting it pass, repeating the irrigation, if necessary, in a few moments or in a short time.



IMPACTION OF THE COLON.

The irrigation with warm water is the remedy par-excellence. It should not be neglected. The spinal treatment and the abdominal manipulations should also be resorted to. They cure.

SPECIAL USES OF WATER—HOT WATER.

Besides the use of water as a drink, cleansing the body and cooking victuals, we wish to mention that when water is used as an internal bath it affords great relief in many cases of pain, more especially in the way of a clyster, through a fountain, or other syringe.

Appendicitis may be cured by a thorough colonic douche, filling the colon with warm water, retaining it as long as possible—fifteen to thirty minutes—and repeating if contents of colon is not removed. There is no better, surer means of curing that much dreaded condition. Use water as warm as patient can bear in cases of flux; frequently repeated saves much suffering, and is the best remedy known for that disorder.

For colicky babies, fill a pint bottle with quite warm water, sweeten with a little sugar, and apply a nursing nipple to it, and let the child nurse all it will of that, especially at night. It will cure colic and quiet the baby so that mothers may have quiet sleep all night from the "crying baby." The "three months colic" will not be if this is used, and the poor, starved baby will begin at once to grow and be healthy.

Water is the best cleanser and absorbent there is. With a little common table salt, one level tablespoonful to a pint of water is the best catarrh remedy there is. Let the patient sniff it up the nostrils and blow it out each time, doing this four or five times at a sitting, and three or four times a day—catarrh will get well in a few weeks' using. Do not forget this remedy; it is worth more than any other catarrh remedy known—and then it does no harm. If the catarrh is bad, be particular to sniff the salt water hard and strongly up into nostrils and clear back into throat.

The above strength applied to sore eyes is an excellent remedy, and if there is pain and inflammation, use the water as hot as can be borne, dipping cloths saturated in the salt water to the eyes or painful spot—anywhere in the body—or outside on surface.

Water with an ounce of Epsom Salts to the pint, is an excellent remedy for all of the skin diseases, rough skin, etc. It is rendered more efficacious by adding ten drops of carbolic acid to a pint of the above mixture and applying it hot to sore or painful parts, chigger bites and insect poisons, eruptions, etc.

SEVERE HEADACHES RELIEVED BY THE USE OF HOT WATER.

Some cases of almost killing headache may be cut short and even cured by applying water, as hot as can be borne, by means of cloths wrung out of, and applied to the stomach—back of the neck, around the wrists and placing the feet in hot water—putting the hot cloths on the forehead as well. The cloths should be repeated every few moments till the relief comes. This is better than any medicine ever used for headache.

A SPECIAL CONSIDERATION FOR ALL COMPLAINTS.

It will be a matter of the first importance to every one who reads this book that it does not matter what the patient complains of, the spinal treatment, from the fourth dorsal down to the twelfth, at least, if not clear down the entire spine, should always be done. This unites the two forces, remember, and neutralizes the excess of acid or alkali, and allows nature to begin to adjust itself harmoniously. In all osteopathic treatments, the spinal treatment as shown under neuropathy, should receive special attention if you wish to be successful in your treatment in the cure of disease of any and all kinds. There is no better way to alleviate human suffering than this spinal ad-

justment, as it is one of the *essentials in all diseases of whatever character, nature or degree*, in all ages.

THE INTERNAL REMEDY FOR BOILS.

Prescribe for the patient to take internally, sub-carbonate of iron (for adult) four grains, to be taken three times a day (children one-fourth as much), together with the spinal treatment once a day, at the fourth to the eighth dorsal vertebra. Also have the patient bathe the body all over daily with a solution of Epsom Salts, one ounce to about a gallon of water. This supplies the skin with the sulphates it needs (on account of eating so much white flour bread).

FOR CARBUNCLES.

This is a condition resulting from a deficiency of the silica in the body and the connective tissue breaks down. Give the sixth potency of silicia every three hours to the patient and if the carbuncles are open apply the pure carbolic acid with a small brush to the sore, protecting the surrounding skin with greased cloths—being careful to only touch the sore with the acid. This is a valuable and a most effectual remedy.

EPISTAXIS—NOSEBLEEDING.

This is a condition that occurs sometimes from hard blowing the nose, and sometimes the forerunner of typhoid fever, or it may come from polypoid growths in the posterior nares.

The specific medical remedy is turpentine, in doses of fifteen to sixty drops at once, taken in a little sugar or sweetened water. It acts like magic and has saved the life of several whom it was my province to prescribe for. The dose will scarcely ever need to be repeated. The neuropathic treatment is to adjust the cervix at the side of the neck, and to hold thumb and finger strongly against the upper part of the neck at the junction of the skull and atlas—pressing with thumb and fingers on either side hard

and firmly for a few moments—and the raising the clavicles and stretching the arm above the head for a few moments. The bleeding is generally arrested at once.

FOR BURNS—SMALL BURNS.

Any sort of a *burn* is painful because of the acid generated therein, and inference would suggest an alkali to *neutralize* the *acid*. The application of soda, soap or spittle would suffice for small burns. Ammonia and olive oil combined are good applications. Unslacked lime, a piece as large as a hen's egg, put into a gallon of water makes what is termed lime water. Cloths wrung out of this and applied to burns constitute a good application.

For old burns which do not seem to heal, an application of castile soap made into a thin paste, by shaving the soap and applying water and boiling it down to the proper consistency, makes an excellent application to be constantly applied. It is the best application known.

LIME BURNS.

Apply diluted vinegar or sour wine immediately, right into eyes, if necessary; it antidotes. Powdered sugar is one of the best things to apply to lime burns.

FOR CUTS AND LACERATIONS—THE COMPOUND TINCTURE OF BENZOINE.

For cuts or lacerations we find this an admirable article to use. Apply full strength on the cut or bruise. It smarts for a moment but is soon over. To use it: Either wrap the wound first, bringing the edges together and holding them together, and then apply the tincture over and on the wound, letting it run through the cloth, enough to thoroughly moisten it all around and on the sore. Use no plasters over a laceration or cut. To hold it securely, wet absorbent cotton in the benzoine, and take small strips and lay them across the gaping wound, while it is brought into apposition, letting edges extend well onto the sound

skin, and then put a bandage on—holding w
it will heal by first intention leaving no scar.
cause pus to form under them. Put enough tin
through cloth once or twice a day till well.

THE REMEDY FOR "PIN WORM.

These are very small worms which infe
and rectum and are very annoying. They m
by injecting a couple of ounces of lime water i
one has discovered these pests, *get* rid of them
careful of the diet. Use more nutritious fo
cleanliness of the skin. Bathe all over once
Salts water—one ounce to a quart of water—
in this, and go all over the body therewith; or
in same proportion is as good.

Avoid excesses and much sweets; live on
cooked food. The application of the neuropa
the eighth dorsal unites the two forces and
cesses and promotes digestion, relieving all
The equalization of the two forces is essential
all diseases.

WHAT TO DO IN CASES OF SNAKE

The first thing to do, if possible, after
ligate limb above bite. Second, either cut
wound, so as to bleed freely. Third, apply
and suck out as much as possible, using salt
mouth afterward, and do not swallow the saliv
from the wound. Fourth, apply an alkaline c
wound—a solution of permanganate of pota:
solution of ammonia or salt water if nothin
Fifth, diluted Lugall's solution of iodine is ar
poison, applied to wound, and one-half teaspoo
of water, and taken in tablespoonful doses
Sixth, inject a solution of permanganate of pot

in and around the wound freely. Seventh, teaspoonful doses of the aromatic tincture of ammonia every fifteen minutes is also an antidote and very excellent.

Common table salt is said to be an antidote applied directly to the wound.

The above will suffice and you need no whisky nor alcohol in such cases at any time.

CORNS AND WARTS—BUNIONS—INGROWING TOE-NAILS.

For corns. Take off the pressure and keep it off. If on the toes, wrap a soft twine around the toe loosely between corn and foot, avoiding pressure on the corn, and wear it for several days anointing corn every night with castor oil.

For warts. Apply tincture of iodine on end of warts every day until they disappear. Another remedy is to apply a solution of acetic acid to wart once or twice a day. This will cure in about ten days. The warts go when not expecting them; seemingly suddenly. Bathing them in Epsom Salts, one ounce to a pint of water, several times a day. Some can charm them off so they say.

Bunions are painful and caused by a dislocated toe joint. Set the joint by pulling it in place, and securing it there with pledget of cotton between the toes.

For ingrowing toe nails. Cut the nails square across and *thin* the top of nail by paring it down on the *center*, on top, as may be borne, and *cut* a notch in center of toe nail, at the end, V shaped, and wear cotton pledgets under corners of nail so as to turn them up, and away, from fleshy part. If corners are sore apply compound tinctures of benzoine once or twice a day.

Cases which have gone so far as that the nail has grown down into the flesh may have to be operated upon to cure.

SMALL-POX.

In addition to the spinal treatment to unite the forces, the use of cream of tartar is the best drink the patient can use. Put

a tablespoonful into a glass of water and drink of it in any quantity and at any time desired. Continue this as long as there are any symptoms of the disease remaining. Anointing with olive oil is all that is needed to prevent pitting. An occasional bath of Epsom Salts, one ounce to a pint of water, in that proportion, is the best application to the skin as it supplies the sulphates to the skin, and much of it is absorbed, and it is as good a disinfectant as can be found. The spinal treatment will generally arrest its malignancy and the disease at once. To remove the scales from the body bathing in Sinol soap is excellent.

FOR MALIGNANT SORE THROAT.

Inasmuch as sore throat is an expression of too much action of the positive forces—and causing an excessive amount of alkalinity in the tissue—the application of an acid is indicated locally. No better gargle—or throat wash—can be used than a solution of sulphuric acid. Make it just strong enough to taste a little sour—say twenty drops to a glass of water—and remember that the pure acid is strong and should be handled with extreme care. It should be stirred with a bone or wooden stick—not a spoon, nor metal in the solution. Use as a gargle—and it won't hurt to swallow a little of the solution. The gargling may be done every one or two hours, or oftener if desired, and the treatment of the neck and spine should not be neglected, for this frees the nerves and blood vessels.

SPECIAL DIRECTIONS TO FOLLOW IN TAKING THE EPSOM SALTS BATH.

While in the bath use friction, rubbing the body thoroughly all over during the time of bathing, and then rub dry with a towel after the bathing.

A half teacupful of the salts to a half bowl of water is sufficient when you desire a sponge bath, and two pounds to ten gallons of water when an all-over plunge bath is desired. The salts bath neutralizes the excessive amount of carbon in the

system, hence it is antitoxin. This is the most salutary anti-septic known.

SOME OF THE USES OF EPSOM SALTS, SUGAR AND WATER.

The following is a quotation from Dr. W. H. Burgess' book "The New Field," and is worthy of profound consideration. It is headed "Laxative Syrup."

"Take equal parts of, by measure, Epsom Salts, sugar and boiling water, and make a solution. Boil for five minutes and then bottle. Dose: one teaspoonful.

"To cure a headache, dose every half hour.

"To neutralize foul secretions in the stomach, dose every morning before eating.

"To cure constipation, dose three times a day.

"For rheumatism, neuralgia, etc., dose every half hour (15 drops; apply salts solution last).

"For a purgative a dose every half hour; three or four doses.

"For a cough, five to fifteen drops every few minutes.

"This is not a crude mixture but a true chemical compound.

"If mixed with water at 70 degrees instead of at the boiling point, it becomes almost ice cold, showing chemical reaction. The taste is good; very different from what you would suppose. Boiled with a few green leaves, raspberry, peach, etc., it resembles olive oil and surpasses all liniments. Colored with poke berries it forms the wonderful *anti-fat and reduces* obesity in a physiological way. Dose three times a day.

"Epsom bath and double sulphide go with it. See treatment for obesity."

OBESITY.

It being a diseased condition of the nervous system, a state of enervation of the nerves ending in the digestive tract from the salivary glands to the stomach and the duodenum where the secretions from the liver and pancreas empty, it is necessary to adjust the spine at the eighth dorsal and unite the two forces so as to promote the digestion of the food, and keep the pores of the skin open by sponge baths once or twice a day, and take

one grain doses of the double sulphide three or four times a day. This preparation contains some of the elements in the blood which are lacking, and this being the case the secretions are insufficient to properly digest the food eaten, and hence the accumulation of the undigested fatty substances in the body. Too much carbon. The diet should be of a kind that has a small amount of carbon in it—more nitrogen and more of the phosphates—thorough mastication and frequent, stated times for deep breathing. The solution of equal portions, by measure, of Epsom Salts, sugar and boiling water, mixed and boiled for five minutes and then bottled for use and taken in teaspoonful doses ter-die, with the other instructions will cure most cases. The above preparation mixed with poke berries will be more efficaceous as an anti-fat remedy. The calcarea phosphoricum, one of the tissue elements in the third potency, in two grain doses three times a day, in cases where there is enervation, weakness and general debility as a result of too much fat.

ONIONS—SOME OF THEIR USES AND BENEFITS.

Onions are used as a poultice in cases of croup and lung affections in their acute form. They should be roasted or baked, and mashed fine and put into a small sack, and spread on the body anywhere, as warm as can be borne to relieve the pain; or for croup around the neck and upper part of the chest. For lung troubles, such as pneumonia, place a large poultice, of the roasted onions, over the entire chest, renewing it and keeping it warm, and it will be a source of great relief. The surface next to the skin should be greased with *old bacon grease*, or vaseline, and after the poultice is removed, wipe the grease off and apply more fresh grease and cloths to the chest to prevent taking cold. The juice of the roasted onion, well sweetened and given to children suffering with cough, in teaspoonful doses, will be found to be of great benefit. Repeat the dose as often as desired.

THE USES OF RAW, SLICED ONIONS.

The sliced onion applied to bee stings, or any other sting of insects, as well as spider bites, affords immediate relief from

pain and antidotes the poison at once, and the wound will not swell nor get sore, nor will any bad effects ensue from the sting or bite.

The onion sliced and covered with sugar makes a nice syrup, which will be useful for coughs, colds, sore throats, and enlarged tonsils to assuage.

Onions fried, make a good and useful poultice for boils, ulcers and old sores. Onions are used as a disinfectant, hung around in the room. The whole body may be smeared all over with fried onion in case of scarlet fever, and then wiped off with a cloth, and serve as a skin protector temporarily. The onion, raw, applied to snake bites, is an excellent antidote to the poison.

HEMOSPASIA—THE DRAWING OF BLOOD TO A PART.

This is used as a remedy in many conditions with eminent satisfaction curatively. When used properly, great and permanent benefit results, and that immediately.

In cases of epilepsy it is a most efficient and oftentimes a radical remedy. In cases of poor circulation, congestion of blood in a part, there is nothing better. Many cases of bruises, caused by striking parts with a hammer, instance, the fingers. To prevent coagulation of blood, immediately wrap the limb between the bruise and the heart tightly with a string, so as to confine the blood in the outer part of the limb—or, if a finger outer part of it—for a few moments till it turns dark all over; then unwrap it suddenly and press the blood back toward the heart. Repeat this a few times, and all the blood that would have settled therein and made a bruised place, will be removed and the part will be well.

If the patient has fits apply a narrow strap around one thigh close up to the hip, wrapping it several times around the limb, moderately tight, so as to arrest the venous circulation, and retain it that way for a few minutes, say, thirty to forty-five minutes, until the limb becomes dark with the venous blood; then unwrap the limb and use friction from the toes, rubbing the limb upward until it seems to be as natural as ever. This aerates the blood which comes to the surface. The arm on the

other side of the body should be corded t remain on until the limb becomes quite d rub arm toward the body until all the cord the opposite lower limb same way, and then the arm on other side. This shc tended to, and repeated daily for several It will be equally efficacious in all kinds stops the venous circulation of the blood fo may be utilized in many conditions; even tism, pneumonia, pleurisy, spinal meningit veins, cramps, heart troubles, snake-bite, gi part bitten; and then let circulation be r again. With judgment and proper care an be used as a sovereign remedy in ever so elastic cord about an inch wide, and six feet convenient for use; as the elasticity tends t tightly. Fits may be radically cured by re every six hours.

SCARLET FEVER.

One teaspoonful of Cayenne pepper, salt. Boiling water a half a pint; strain a good vinegar. When cold, give a teaspoon adult. To children half the quantity for an portion. Use the same as a gargle also freq hours.

Another most excellent domestic remedy from old bacon or take old bacon and grea over twice a day, and apply slices around t upper part of the chest. Bathe the body a dry and then add the grease, greasing the b well each time.

A REMEDY FOR STONE IN THE

Boil common garden beet as for table
tient drink a half a teacupful of the juice
This is said to cure bad cases in a few day:

ANOTHER REMEDY FOR STONE IN THE BLADDER.

To one quart of soft water, add three teaspoonfuls of powdered borax, and six teaspoonfuls of cream of tartar; stir them till dissolved, and then take two or three tablespoonfuls three times a day. This is an excellent remedy for that dread condition.

It is suggested by one of my colleagues that in order to get an increased action of the kidneys, which eliminates the urea from the blood, and thereby cures rheumatism and neuralgia, it is essential that the nitrates should abound largely in the diet. The nitrates and phosphates should largely predominate, and then crystals of uric acid are dissolved and eliminated through the kidneys and skin.

See Dietary list elsewhere in this book for a selection of food to be eaten.

SOME SUGGESTIONS FURTHER, ABOUT WHAT TO DO IN CASES OF BURNS.

Molasses, applied to a burn immediately, is a most excellent home remedy.

Equal parts of lime water and linseed oil applied to a burn is excellent.

A solution of two ounces of alum dissolved in a pint of hot water and saturate cloths and applied to the burn relieves pain almost immediately, and cures it.

Sprinkle common soda on the part burned; will be efficient for small burns.

The application of *soft soap* will afford relief very quickly in superficial burns.

Oil of peppermint applied to a burn will immediately extract the fire and cure the burn.

The application of *Indigo Bluing*, will extract the fire and cure the burn.

If the clothing catches on fire, wrap the person up in a quilt or blanket at once, or roll them on the ground to extinguish the fire.

If a burn is extensive, apply at once good sweet lard. It can be purified by putting it in hot water for a few moments, and using the oil that arises to the top.

An excellent application to a burn is absorbent cotton, leaving it on the burn, and occasionally sprinkling over it Carbolic Acid. Leave the cotton on till it sloughs off.

Kerosene oil is another excellent remedy, which see in another part of this book.

Cosmoline is an excellent remedy for scalds and burns. First apply a strong solution of baking powder by means of cloths wrung out of it, to the burn to relieve the pain; then smear moist cloths with the Cosmoline and apply directly to the burn, placing on the outside of the cloth smeared with the Cosmoline, absorbent cotton.

These remedies will be found to be invaluable, and reliable for any sort of burn. Some one of the articles will be found in almost every house, or convenient to use.

SPECIAL TREATMENT FOR RHEUMATISM.

There is nothing better to relieve the pain and lessen the swelling than a bath of Epsom Salts; say a couple of pounds to ten gallons of warm water; dissolving the salts in hot water and then pour into water for the bath, and put patient into it, and let the water cover the entire body for ten or fifteen minutes, then use friction with dry towel, and lie down and rest until the circulation is normal.

An excellent application to swollen joints is a solution of the Epsom Salts in the proportion of one ounce to a pint of hot water, and the application is best made with cloths wrung out of the hot solution, repeating them every five to fifteen minutes until relieved.

The double sulphide in grain doses for a day or two, every three hours, will be an excellent remedy to eliminate the poison from excessive lactic and uric acids. The use of lemon juice should be duly considered and used without any sugar, in water. The treatment of the spine at the fourth, eighth, twelfth dorsal, and first and second lumbar area, are essential above every-

thing else; and this should be done two or three times a day until all the acids are neutralized in the blood.

Cloths wrung out of strong salty water and applied around painful and swollen joints—hot or cold, as is most pleasant, and covered with dry cloths, so as to keep parts warm, from taking cold from exposure to the cold air is an excellent remedy.

THE QUAKER REMEDY FOR RHEUMATISM.

Take one teacupful of table salt, one teaspoonful of Cayenne pepper, water one pint, mix. Heat to a boiling point. Bathe the affected parts while hot, for fifteen or twenty minutes, three times a day.

It is a good idea to wet flannel cloths in this solution and apply to the parts affected—over these cloths apply a dry cloth to keep the parts warm. Many chronic cases have been cured in this way, after suffering for years. It is surely worthy a fair trial, and a continuance for days.

ANOTHER POTENT REMEDY.

Take a heaping teaspoonful of Rochelle Salts, *dissolved* in water, every two hours, until *six doses* are taken; then take it *once every four hours*. Many cases of rheumatism are due to a lack of alkali in the blood, and this supplies that element, and thus rheumatism ceases when it is used. *In all cases of rheumatism, do not fail to adjust the spine from the fourth dorsal to the twelfth, treating the several prominent vertebra. This unites the two forces and neutralizes the excess of acidity or the opposite—the alkalinity, and harmonizes the elements to a normal condition.*

After the first day's using the above, take three or four doses a day, for a few days, until the pains all cease.

A FEW HINTS ABOUT THE USE OF LEMON JUICE.

The juice of lemons is the best antidote to poisons we have in the vegetable kingdom. It is the best anti-malarial known; and it is a fact that many cases of biliousness respond to the free use of lemon juice quicker than from any other agency known.

Lemons are good for the lean as well as the fat people. It is excellent for the skin, applied in solution with about eight parts water. It is a good digester, and better than soda for sour stomach. It is the best anti-scorbutic. The lemon juice is the best thing to use in water for fevered patients. Lemon juice is the best drink an hour before breakfast that the invalid can take; always dilute the juice of one lemon with a glass of cold or hot water and drink it down. The teeth and mouth may be washed with diluted lemon juice, as well as with salt and water, and serves a better purpose than all the tooth paste in whitening the teeth and neutralizing the poisons which accumulate on the tongue from breathing with the mouth open. Lemon juice should be used daily for all invalids, and will be a grateful beverage for everybody at all times, in every country and for all people.

The caution needed in the use of lemon juice is, not to use sweet milk within an hour of taking the lemon juice. There is not much in oranges but juice, and but little benefit as regards health, but are a fine relish when ripe and sweet.

Ripe fruits, eaten in moderate quantity serve a purpose: that of aiding digestion and in keeping the bowels in order. Stewed or baked apples are a good relish for many people. Many people require a variety of acids, and these are found in fruits of various kinds. There is no objection to the use of good cider vinegar in a little water occasionally. Some cases of very tenacious coughs are benefited by taking small sips of vinegar in a little water; say add two tablespoonfuls of vinegar to a glass of water, and sip a little of this every half hour or hour. There is a limit to be observed in ingesting fluids or solids, and the quantity should be according to the necessities of each case, and conditions. We all eat too much, and too often, perhaps. Experience and judgment should govern us in that regard. So the food is thoroughly masticated before swallowing, it matters but little what we eat, so we select what will make up the deficiency of what is lacking in the system. See the table of foods for information as to the elements contained in various foods. The no-breakfast plan is a good thing for many invalids. Try it who wishes.

In case of fevers, it is well to observe this strictly and reg-

ularly as often as the necessity seems to demand. It will not be amiss to place the fever-patient in water at a temperature of about 80 degrees and kept there for fifteen minutes until an appearance of blueness ensues, or until the fever subsides, then take out and rub dry with a dry towel. This may be repeated daily. It will add to the efficacy of the bathing to add a handful of salt to the water, or a tablespoonful to a gallon of water used in the bath.

Sometimes we find a dry scurf all over the body, like scales, and sometimes real scales. In such conditions daily bathing becomes a necessity to remedy the affection. The best way to do in such cases is, to use *Epsom Salts* in the water, in the proportion of two pounds to ten gallons of water; or, if a towel is used, and what we call a sponge-bath, then use one ounce of the Epsom Salts to a pint of water. The water may be either warm or cold, as suits the feeling and condition of the patient. To make the bathing still more effectual, we recommend that you prepare a compound as follows: Take three and a half ounces of glycerine and put into that one-half ounce of Carbolic Acid and keep in a bottle convenient for use. When it is needed use it as follows, and in the following proportions, to-wit: Take one ounce of Epsom Salts and dissolve it in one pint of water, and then add one teaspoonful of the compound mentioned above, and then apply that over the body. For children, with skin affections, the solution of glycerine and carbolic acid should be only half as much, or use double the quantity of water. This may be applied with a towel wet in it and wrung out moderately dry. If there is pain, use the compound hot as can be borne by means of cloths wrung out of it and constantly applied. It is effectual in such conditions at once, generally. Use it.

There are so many conditions benefited by the use of water that it is a necessity to use it externally as well as internally—very freely, for the system is largely made up of water; at least seventy per cent of the body is water, and it requires water to carry on its circulation of the fluids and carry out the waste materials constantly accumulating.

In sore throats a cold compress is one of the essentials, rightly used and repeated. The water may be applied with

or three times at a sitting, and followed up with a coarse, dry towel will suffice for a sponge-bath, once a day.

The plunge-bath is all right, but should not be used too frequently nor in too warm water; nor should the body remain in a warm bath any longer than to rub the body over thoroughly, and then emerge at once, and follow up with either a towel wet in cold water, or have a gentle shower bath, suddenly applied and only enough to change the current of blood; then use a rough towel freely all over the surface at once, and dress immediately.

Soap should not be left on the surface, but washed off with clear water.

In case of fevers, it is well to observe this strictly and regularly as often as the necessity seems to demand. It will not be amiss to place the fever-patient in water at a temperature of about 80 degrees and kept there for fifteen minutes, until an appearance of blueness ensues—or until the fever subsides; then take out and rub dry with a dry towel. This may be repeated daily. It will add to the efficacy of the bathing to add a handful of salt to the water or a tablespoonful to a gallon of water used in the bath.

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In sore throats a cold compress is one rightly used and repeated. The water may cloths wrung out of it and over-wrapped v This worn around the neck all night is on plications for sore throat.

Many conditions called disease simply with water—either cold or hot water.

Judgment should be used in this, as v agencies, to be effectual.

A FEW THINGS ABOUT LIMES AND L

These are semi-tropical trees and grow south and western parts of the United States, trees, and when full of fruit are very inviting.

The fruit is a beautiful yellow and the juic and is the part used.

Many conditions called disease may be cured by their proper use. We have said a fe use of lemons elsewhere in this book, and v more things, thinking they may be useful to t know how to use them for conditions which ar any time, and save much time and suffering t certain conditions.

Most people have heard of them curing cutting a hole in the lemon and inserting the few hours. One or two applications of the l

in that way generally cures the felon, when used at the commencement of the pain,

If a lemon is put into the stove and roasted or baked until the juice begins to exude from it, and the juice then squeezed out of it, and sweetened to the taste, and one or two teaspoonfuls of it taken three times a day, and then on retiring, it is said to break up a cold at once.

For biliousness, lemon juice is one of the best remedies known. Take the juice of two lemons a day, in four doses, as follows: Put a tablespoonful of salt in a pint of boiling water, and add the juice of two lemons to it, and let it get cold, and then take it in tablespoonful doses before meals and at bedtime. A better way would be to take half a lemon, the juice of, separately, and the salt without the lemon mixed in it, as a pint of the salt water would last better, and the lemon would be more effectual in larger doses.

The lemon juice taken in a little water, three times a day, will cure malaria in a short time.

Lemon juice is a good application to the skin as well; especially in erysipelas. For that affection, take a gill of brandy and add the juice of two lemons, and apply to the inflamed part by means of cloths moistened in this mixture, keeping them wet all the time. It is said that but few remedies are better than this one.

The following will be a great boon to the scarlet fever patient, as the doctors are often puzzled to know just what to do for this affection. This will be the thing to do for scarlet fever. Make a lemonade, moderately sour, and to a glassful of it add a half teaspoonful of pulverized gum Arabic, and stir it well together. Let the patient drink some of it, and then apply a warm flannel cloth all over the abdomen, then apply a white woolen blanket, wet in as warm water as the child can bear. Put into that water first, one or two ounces of Epsom Salts, and wrap the child all up in it, except the head, to which apply moderately cold water, and then wrap a dry flannel cloth outside the wet one and then add covers to make it warm, so as to sweat the patient for about an hour, and if it does not sweat, apply hot bottles and hot rocks around in the bed, keeping the head wet

occasionally with the cold water, (not too cold), and keep repeating an occasional drink of the lemonade. After the sweating has been going on for an hour, unwrap it and rub dry with cloths and wrap it in flannel or put on warm clothes and do not let it take cold, but keep right on giving it, (the lemonade) as above prepared. After the perspiring and rubbing dry, apply all over the body, either sweet oil or the grease squeezed out of bacon, and put on its nightdress, and cover it with bedclothes sufficient to keep it comfortably warm, and continue the lemonade, and your patient will be cured, and will be all right in a short time. The body should be bathed once or twice a day with Epsom Salts water; a tablespoonful to a pint of water, and let light diet be given it.

The following method will be the thing to do in cases of diphtheria:

Gargle the throat with lemon juice every one or two hours, (if too strong, dilute it with a little water). This will cut loose the membrane which forms in the throat. Apply all over the body twice a day, or oftener, a solution of Epsom Salts, an ounce to a quart of water, sponging the body with a wet cloth, and be sure to keep applied to the outside of, and in front of the neck, cloths wrung out of the Epsom Salts water, either cold or hot, but often repeated. The latter serves as an antidote to the toxic matter in the blood; neutralizing it better than anything else known. Be sure to do this, and your cases of diphtheria will all get well.

The dreadful disease rheumatism, can be cured with lemon juice, if used as follows: If you will pare a lemon and cut it up in slices and fill a quart, or any sized bottle with it, and then add as much grain alcohol as will fill the bottle, and then take of this mixture about a half a teaspoonful before each meal and at bedtime, you will find it the best and most effectual remedy known for that dreadful complaint, acute or chronic. It will add much to the comfort and speedy cure of this affection, if, in addition to the above, you use the following: Make first this compound: One-half ounce of carbolic acid mixed with three and a half ounces of glycerine, and keep it in a bottle for use. Now, take two ounces of Epsom Salts and put into a quart of

hot water, and when cool, add two teaspoonfuls of the above mixture of glycerine and acid, and shake the mixture thoroughly, and then sponge the body all over with this by wetting the cloths in it. To be saving of it, just pour out of the bottle some of the liquid on the cloth so as wet it thoroughly, and then rub the body all over with it. Do this three or four times a day; bathe the feet also in the same salts water, as above prepared. Use the same by means of cloths applied over the painful parts, but have the liquid hot as can be borne, and frequently repeated. This is invaluable, and will not disappoint you. The dose of lemon may be given every three hours in bad, or acute cases.

The use of the juice of the lemon in dropsy is astonishing. It should be taken in all cases of dropsy (although dropsy is only a result of some other affection), this is the remedy, par-excellence. Slice the lemon (after it is peeled), and cover with sugar. To begin with take the juice of one lemon a day for the first day, and gradually increase the quantity to seven or eight a day. Use the Epsom Salts solution as in the preparation for rheumatism, daily, and the swelling will soon subside.

For such conditions as heartburn, a little lemon juice taken will arrest it at once.

For sore throat, there is nothing so good as a frequent gargle with lemon juice, and a little of it swallowed while gargling it.

Taking a small quantity of lemon juice every little while will arrest that most annoying, and often fatal condition called hic-cough. This may be used frequently, in connection with desensitization of the phrenic nerve at the third cervical on the left side of the neck, or as it crosses the first rib, about its middle, back of the clavicle; pressing on it for a few moments, or raising the ribs on each side where the diaphragm is attached, pressing the diaphragm upward a moment.

Some people cure chills by using the juice of lemons, as follows: The juice of a lemon is added to a cup of coffee and drank, and repeated, using it twice a day, and another good way is to take a half a dozen, cut them in slices and boil for half an hour in a pint of water; strain, and give a teaspoonful every hour or two for three or four days, during the wakeful hours,

or when the chill is on, and other days every four hours. It matters not so much about the hours, so plenty of the lemon juice is taken.

THIS IS THE REMEDY FOR LA GRIPPE.

A teacupful of lemonade taken every fifteen or twenty minutes, taken hot, taking as much as five or six cupfuls, and then repeated every two hours, will be found excellent.

There is no better remedy for consumption than the free use of lemons, and they may be peeled and sliced and then boiled for a half hour, half a dozen at a time, and then sweetened to the taste, and a half a dozen taken in one day that way; say the half dozen boiled half an hour in a pint of water, and then sweetened and taken in small quantities so that all may be taken in one day.

The use of the Epsom Salts baths should not be omitted in all lung affections.

Lemon juice will cure tan blotches if the face is washed therewith a few times.

By applying the lemon to styes, repeating a time or two, will cure them very readily.

If a piece of sliced lemon is applied to corns, and worn over night, a few applications cures corns.

A little lemon juice taken in the mouth and let trickle down the throat, for a few times at short intervals, will cure hoarseness.

In some cases of asthma, the juice of half a lemon, or a tablespoonful before each meal will be effectual, and should be tried by those suffering from this complaint.

There is no better remedy than a half a lemon taken three times a day for scurvy.

If you will take the juice of two lemons and put it into a quart of tea, adding the lemon juice to the tea when it is boiling hot, and bottle it when cool, and then take a teacupful every two or three hours, you will find it most excellent for *headache*.

It is said that the juice of half a lemon and one teaspoonful of sugar and one of water taken at a dose, will cure blood-

poisoning. The above is a dose, all of the above, and should be taken every half hour for three or four hours.

It is an excellent thing to remove stains from the hands—apply the clear juice.

Lemon juice mixed with equal parts of water is an ideal toothwash.

The juice of one lemon taken in a glass of hot water every morning will reduce fat. It is the best remedy for that condition. One man was reduced seventy-five pounds in one month by this means, and doing without his breakfast.

Hanging clothes on nails when wet causes stains, and these may be removed with the juice of the lemon—apply it and hang out in the sun, such a garment. Repeat a time or two and the stains will have disappeared.

There are so many uses for this valuable fruit that we cannot mention all of them, but suffice to say that it is one of the most useful of all that is known, especially for those conditions which have baffled the skill of all medical men, and will not only save much expense to every family, but life itself, if the use of lemons is adopted in every family.

FOR GRIPING OR TENESMUS IN ANO DURING FLUX.

Press the interior point of the mastoid process, just back of the ear, firmly. The pressure should be made for a moment or two, and it suffices.

FOR DILATATION OF THE UTERUS—THREATENED MISCARRIAGE.

Press the *rib* just forward of the anterior end of the scapula.

SNAKE-BITES.

Immerse the limb in Kerosene oil. It extracts the poison. Eucalyptol, in *five drop doses*, every two to four hours, is said to be a sovereign remedy for la grippe.

Sugar is a remedy for *lime in the eyes*, or for burns by lime anywhere on the body.

A strong tea made of the bark of the root of the common willow; a handful to a quart and boil to a pint; and a half a tea-cupful three times a day, or less quantities oftener, will cure *flux—so said*.



When food disagrees with the stomach, and bloating and digestion ensues, or from eating something that disagrees with the digestive organs; take from one to three or four teaspoonfuls of cream of tartar, dry on the tongue, swallowing it as it dissolves, not taking water for at least a half hour after taking it; it will be the most salutary and efficient remedy one can take. Take nothing else.

Taken in half teaspoonful doses three times a day is an excellent remedy for dyspepsia, always taken without water, and drink no water for at least a half hour afterward.

FOR AN OVERDOSE OF MORPHINE.

Inject a solution of Permanganate of Potash hypodermically or take it internally. This is an antidote to morphine and opium poisoning. Inject in deltoid muscle.

HICCOUGH (SINGULTUS).

This is a nervous condition which often proves fatal, and is easily arrested when one knows just the thing to do to arrest it. It is a result of nerve irritation—and that usually at the termination of the phrenic nerve which ends in the diaphragm. As this nerve emerges between the third and fourth cervical vertebrae on the left side of the neck (about the middle of the neck) the treatment is easily performed. If gentle pressure is made with the finger—the palm—just where this nerve emerges from the cervical vertebra, for a few moments—generally not longer than one minute—the irritation ceases and the hiccough ceases. This is worth many times the price of this book when the knowledge is needed to arrest this most distressing condition. The result will be the same if pressure is made on the first rib (about the middle and back of the clavicle) at a notch where the phrenic nerve passes over the rib downward to its ending in the diaphragm. The reason it cures is on account of the pressure arresting the irritation at the nerve endings, by semi-desensitization of the entire nerve where mentioned.

When one knows a reasonable amount of the functions of the nervous system, and where the nerves may be reached

influenced, there should be no hesitancy in arresting conditions which medicines have no power to influence or effect curatively.

THE REMEDY FOR GALL STONES—FOR THEIR REMOVAL.

The patient should take a large tablespoonful of Epsom Salts at night on going to bed. Next morning take one glass tumbler full of olive oil, putting into it a little lemon juice, and have some black coffee made and ready to swallow immediately after swallowing the oil. Take another dose of the oil at eleven o'clock, and another dose of the salts at four o'clock. This should be sufficient for the course and is usually successful in its work. The discharges should be made in a vessel so as to secure the gall stones which may be washed out with water. The above is worth many hundred dollars to the sufferer.

FOR EAR-ACHE.

Place a silk handkerchief over the ear of the sufferer and let warm breath be blown into the ear through the handkerchief several times. It relieves at once and saves suffering.

DIZZINESS.

This condition is nearly always due to muscular imbalance of the extrinsic muscles of the eyes, and the remedy is to treat the eyes with prisms repeatedly, until they perform their functions normally. Kratometric, gymnastic exercises are the best means for a cure. If there are temporary dizzy spells they may be caused by over-eating or from some impediment in the circulation of the blood. The neck treatment is to be instituted then.

FAINING.

That is better relieved by placing the patient in the recumbent posture and sprinkling cold water on the face. The neck treatment is indicated after the spell is over.

HAY FEVER AND ASTHMA.

The fourth dorsal treatment, together with divulsion with the bivalve, cures these conditions.



There are many conditions which succumb to the *union* the *two forces* which need not be specially mentioned, for it makes no difference where the affection is located; the remedy is to take off the pressure and stop the waste of nerve power, and these are all that nature demands in any case.

See index to plates for various and sundry treatments for various conditions (Osteopathic Department).

WHAT TO DO IN CASES OF DROWNING.

The first thing is to get the patient out of the water as soon as possible and in some suitable place to get the water out of the stomach and lungs.

If possible, secure a barrel or something round—a log is good as anything—and begin to roll the patient backwards and forwards, lengthwise on the stomach and on the back, so as to empty the water all out; then begin a systematic course of artificial respiration by stretching the arms high above the head and suddenly bring them down against the sides, and blow with your mouth into patient's mouth, at the same time holding the nostrils of the patient, blowing strongly while some one is going through with the artificial respiratory process. Continue these movements until recovery takes place, or long enough to show that it cannot be accomplished. If your patient shows signs of life persevere steadily, but do not overdo. Be careful and meet all indications promptly and with judgment.

After life is restored, use warm applications to the body and friction with warm cloths. Then let patient rest undisturbed for a time to recuperate strength and the normal feelings over the body. See to the circulation of the blood, but give no stimulants nor food. Breath is what the patient needs now; let alone and see that plenty of fresh air is allowed.

Resuscitation should be done as carefully as possible, be careful not to bruise the lungs while rolling patient over the barrel. You may save the life even after a person has been in the water an hour or two; the effort is worth while and should be made.

MAGNESIA SULPHATE (EPSOM SALT).

This is regarded as a physic, a saline cathartic, and used generally for that purpose. There are so many conditions this article may be used for that we shall attempt to enumerate but a few of them.

As a disinfectant it has no superior, and as an antidote to Toxines, it is perhaps the best there is. It has a special influence in dispelling the effete matter from the skin when used as a wash, and opens the pores of the skin better than any articles we know of. It also supplies the skin with the sulphates, which, being deficient, cause eruptions and eczematous conditions on the surface. It neutralizes the poisons from insects of various kinds, and furnishes sure protection against rheumatism; and locally applied, in hot water, relieves pain with surprising rapidity.

In order to have in readiness a preparation to mix with the salts solution, prepare the following, which may be used for any skin trouble when mixed with the solution. Take three and a half ounces of glycerine and one-half ounce of carbolic acid and mix thoroughly together, and keep it, in a bottle, ready for use. When used, or to be used, in the solution put one teaspoonful of the mixture into one pint of water, into which one ounce of Epsom Salts has been dissolved and shake it well before using. It may be warmed or used cold. Hot for pain, by the use of cloths wet therein, and cold when no pain exists. The solution is fine for any sort of skin trouble and may be used frequently, two or three times a day or oftener, or kept applied all the time for a disinfectant and for antitoxine effects, as it is the best antidote known for that poison stuff.

The salts solution is fine for intestinal affections and one can hardly go amiss in using a moderate quantity at any time for almost any condition of the bowels, skin, or as an antidote to malaria and other supposed poisons in moderation. An ounce of salts to a pint of water dissolved therein, and four ounces of glycerine and as much rosewater, makes an excellent wash for the face and hands to keep the skin soft and white and clean.

ANOTHER METHOD OF TREATING FOR GALL STONES.

Take one gill of sweet oil before retiring at night and the next morning a dose of Seidlitz Powder, and one every hour until an action of the bowels takes place. This may be repeated in three or four days. Two or three doses are generally sufficient to remove the stones. Avoid eating wheat bread, and use fruits and vegetables which have no lime in them. Rice and sago, berries and milk and distilled water may be used.

KEROSENE OIL IS ONE OF NATURE'S BEST REMEDIES FOR DISEASE.

From the crude petroleum which was used as a liniment, to its partial refinement and use in lamps, the more refined name and nature called kerosene, we have one of the most useful, next to salt, of all the productions from the bowels of the earth. The coal we burn in our stoves is probably the source of kerosene.

When we consider that one application to the throat, of a cloth saturated in this oil, will cure sore throat, we will wonder why so many people suffer with sore throat.

A little cotton saturated with kerosene and put into the cavity of an aching tooth is a remedy that affords immediate relief in almost every case, and a cloth wet with kerosene and applied to a corn, and it kept on for a few days, saturated with it, will cure if you take off the pressure and the corn will disappear.

One teaspoonful of oil and kerosene taken in a teacupful of new sweet milk is said to cure chills, and usually one dose does it. It may be taken in half the quantity by children and weakly persons, and may be repeated daily, if necessary, with no harm.

For burns there is no better remedy. It may be mixed with the same quantity of olive oil or linseed oil and applied by means of cloths saturated therewith, and repeated from time to time, or it may be used without the oil by itself.

The celebrated "Johe" is largely composed of kerosene, and is most effective in many cases of burns, sprains, etc.

There is, perhaps, not a remedy which will cure *croup* as quickly as kerosene oil will. Saturate a cloth with the kerosene

oil and place it on the throat and upper part of the chest, and give internally from three to twenty drops every half hour, lengthening the time between doses as the case improves, and this will prove satisfactory.

It may be administered in two or three drop doses on a little sugar every half hour, and cold water used on the throat by means of cloths wrung out of it and applied frequently. This is a good remedy for the pseudo-membranous croup.

If applied by means of a swab to the throat, inside, in cases of diphtheria, it will be efficacious and effectual. The swab should consist of absorbent cotton and shaken well before introducing it into the throat, so as to avoid giving too much at once. This is surely a sovereign remedy and may be relied upon when properly used.

In that very troublesome condition produced by the poison vine, if kerosene is applied to the parts affected three or four times a day until the inflammation subsides, the cure will be effected; but for this affection the crude oil is the kind to use—petroleum.

Cloths saturated in petroleum and applied to sores and bruises is soothing and it causes wounds to heal, abates pain and aids in healing as well.

Petroleum mixed with glycerine makes a good application to the hands as well as to mix into the hair to remove dandruff.

Many cases of rheumatism are benefited, and some cured, by the application of kerosene to the parts affected by rubbing with the oil.

It is an excellent remedy in snake bites. One teaspoonful taken internally and then put onto the bite; but there should be an opening in the skin so that absorption can take place readily and it kept applied.

Petroleum or lard applied to rheumatic painful parts, applied warm and rubbed in thoroughly, are excellent applications to assuage that condition. Neuralgia is likewise greatly alleviated from the use of these applied hot to the parts affected.

In all throat troubles, including quinsy, the local application of kerosene, externally and internally, is said to be a specific.

In pneumonia, if cloths wrung out of kerosene and applied

over the lungs, great relief will be obtained in a short time. If thus applied at night, on the lungs of patients afflicted with consumption, it will alleviate the suffering and will cure some cases thought to be beyond the reach of remedies. It is worth while to use it for that affection.

It is said that the oil of peppermint is one of the best remedies for quinsy, applied externally on and around the throat.

In many cases of swollen bowels, even appendicitis, may be relieved by the application of cloths wet in hot water and a few drops of turpentine sprinkled over it and applied hot, to the entire bowels, will afford relief, and should be followed up with the cloths wet in the kerosene oil or kerosene mixed with vaseline.

Some cases of piles are cured by the injection of small quantities of kerosene oil into the bowel, once or twice a day.

In asthmatic affections kerosene has been used with success, after many remedies had been tried to no avail, by inhaling the fumes into the lungs and rubbing the hands with the oil, especially the palms, and by applying the oil to the neck and chest twice a day relief will almost always be the result.

Those who live in the country and who burn coal oil will be proud to know they have in their houses such a valuable remedy for so many conditions they are liable to have in their families.

The simple remedies which do no harm, especially when used with discretion, are generally the most potent for relief, and worthy of our special consideration. And with a little study and experience every family may become their own doctor and save money, time and life, as well as the sadness which sometimes is the sequel of neglected sickness; whereas, when the remedy is in the house and it is known how to use it, relief can often be attained at once, and the owner of this book will save many times its cost as well as the satisfaction of saving the life of some dear one.

The neuropathic and the osteopathic departments are unexcelled, so far as manipulations are concerned, and should be understood so as to apply them whenever needed. The ophthalmological department is also invaluable and will fit in, in many a case where nothing else will.

With deep breathing, diet, suggestion, exercise, and the use of Epsom Salts, together with the many suggestions made in this volume, a world of suffering may be, and can be, avoided.

The uniting of the two forces is the most valuable discovery for the relief of human ills of this century, or any preceding it, to the world, in the art of healing, and the philosophy of healing through the science of neuropathy will go down the ages, when understood, as the best means possible for the purposes intended.

DOMESTIC REMEDIES.

Our book would be incomplete were we to omit saying something about some of the common things obtainable, and which are of incalculable value to many people in cases of sickness. These are salt, lemon and kerosene oil.

These articles are the most plentiful of anything we use, and when we know how to use them are the most useful for certain conditions of anything we use.

Salt is the most valuable to cure disease of all other articles in use, and there is an inexhaustible supply of it.

We have said elsewhere that it is useful as a cure for catarrh and given directions how to use it; also how to use it in sore eyes and how to bathe the body with it.

We would recommend it in other cases, such as felon, mixed with white of egg and used as a poultice, renewed in a few hours if it does not relieve, which it will do in all cases if applied at the beginning.

If salt be moistened with a little water and applied to burns, it will prevent blistering, and is one of the very best remedies known for burns.

Applied to neuralgic and painful parts and all painful conditions anywhere in or on the body, either hot, and in sacks of convenient size, or in solution of a half a pint of salt to a quart of hot water, and cloths wrung out of it and applied to the painful part, it will be found effectual. Repeat it and apply it warm each time.

In bleeding piles it is a sovereign remedy; used as an injection, as warm as can be borne by the patient, two or three times a day, will arrest the bleeding; and the solution may be

used of varied strength, from a tablespoonful to a pint of water of salt solution, to more if needed. Medium strength is, perhaps, the safest to use and as effectual.

In toothache a solution of equal parts of salt water (a tablespoonful of salt solution to a pint) and a half a tablespoonful with the same quantity of camphor mixed together and held in the mouth, will usually arrest the toothache in a short time; use it as warm as can be borne and repeat it if necessary.

There is no better remedy than a strong solution of salt and water—hot—applied to a sprain or a bruise, kept moist all the time until well.

If salt is taken in half to one teaspoonful doses three times a day it will cure almost any case of chronic disease of the spleen or constipation.

In cholera morbus, if a tablespoonful of salt is added to a pint of water and a half pint of cider vinegar, and then mix in this a teaspoonful of ground black pepper, and a tablespoonful taken every twenty minutes will be found to be one of the very best remedies to relieve that condition.

In some cases of colic a teaspoonful of salt dissolved in half a glass of water and taken at the commencement of the attack will arrest it at once.

A drink of salt water of the strength of a teaspoonful to a pint, given in teaspoonful or larger quantities, to one just going into a spasm or fit, if they can swallow, is sometimes effectual in arresting any further spasm at the time; and the head sponged with the salt water is excellent at the time of the spasm.

In cases of fever and ague the use of salt is a sovereign remedy; but it must be *browned*—made brown like coffee—which can be done in a stove of moderate heat. The dose of this browned salt, for an adult, is a tablespoonful dissolved in a glass of tepid water, every morning following the fever. If the patient is thirsty let water be drunk through a tube of small size. After taking the salt the food should be light for the next forty-eight hours; say, chicken or beef broth.

Salt mixed with equal parts of sugar and a small pinch taken at night, when there is a tickling cough or sore throat; it will be a satisfactory remedy in most cases.

In bleeding of the lungs, frequent doses of salt in half teaspoonful doses is the best remedy known to arrest it. Repeat dose every twenty minutes.

For that condition called diarrhea, put one tablespoonful of salt into a teacup and then add one tablespoonful of vinegar to it and fill the cup with hot water, and this preparation, from one to two teaspoonfuls, as hot as can be borne, every ten to fifteen minutes. If one should vomit repeat the dose. This will cure obstinate cases, not only of acute but chronic cases.

It is an element in the blood and holds all solids in solution; hence, useful in cases of blows or bruises from falls or other ways; even where apparent death is a result, salt water should be administered immediately, if possible, internally and used externally. The usual method of preparing it to take internally is a teaspoonful to a pint of water, and yet a tablespoonful to a pint of water is better; then take a tablespoonful at a dose as often as five to ten minutes till relieved.

In case of worms in children, if one teaspoonful of salt is stirred in a half pint of tepid water and injected into the bowels of the one troubled with worms, once a day for three or four days, it will cure them of pin worms. Lime water injections in two to four ounce doses injected into the bowels removes all the pin worms at once. Try it.

There is no better remedy than a half teaspoonful of common salt twice a day for dyspepsia. The dose may be from a fourth to a half teaspoonful, and for disordered conditions of the stomach. A good way to take the salt is to put half a teaspoonful dry on the tongue and then drink a glass of water slowly, washing the salt down. This should be taken half an hour before breakfast every morning until relieved.

For torpid liver the juice of one lemon with a half teaspoonful of salt, mixed with a half pint of water, and drank half an hour before breakfast, is a sovereign remedy. The lemon and water may also be taken at bedtime.

The application of a small sack of salt—made as hot as can be borne—to the abdomen, in cases of colic-painters, or any other pain, is a sure relief.

It is said that a strong solution of salt and erysipelas is one of the very best of remedies constantly wet with this and applied to the parts. The proportions should be a tablespoonful to a pint of water; then add brandy.)

Salt water applied to the entire body, and rubbed thoroughly, will cure any case of erysipelas in a short time. The daily sponge or towel bath is an excellent one and should be used by everybody.

If one has hives a little salt bound to the skin will, it is said, cure the hives in a short time.

A little salt dissolved in the mouth and swallowed cures that condition known as heartburn.

There are so many uses for salt that we cannot mention them all. It is worthy of the most profound respect as it is always at hand and many conditions may be cured by its use intelligently applied, and save man much suffering and expense; and many uses also.

A FINE REMEDY FOR MEMBRANOUS

To one quart of strong vinegar add one pint of salt, while vinegar is hot, and wring cloths out and hold to the mouth so that the fumes can be inhaled; and it is effectual in loosening the membrane.

ONE OF THE QUICKEST AND BEST TAPE WORM

Let the patient eat a light supper the night before the remedy, and then, in the morning, eat nothing but milk for breakfast, and half an hour after the first dose (in an adult) ten drops of chloroform on a little sugar to be swallowed at once, and repeat the same twenty minutes afterward.

In fifteen minutes after the last dose of chloroform the patient take four ounces of castor oil, keep the patient warm with lemon juice or coffee. Take the oil warm.

The mistake people make in expelling

starve the patient and the worm so that the worm exerts all its powers to hold to the surface of the intestine.

The above directions followed strictly will be effectual in getting rid of the worm. There are many other remedies but this is the one to succeed with.

Children may take the remedy proportionately as to size.

The treatment may be repeated in a month if the first round does not remove it all, or any of it.

TO CURE GOITER BY LOCAL APPLICATION.

Use colodion spread on the entire outside of the tumor—put on with a small brush—three times a day. It acts mechanically, squeezing the blood out of it gradually.

TO REMOVE PINS, NEEDLES, TACKS, ETC., FROM THE STOMACH AFTER BEING SWALLOWED.

Let the patient go to eating cooked Irish potato—eating nothing else for a day—and follow it up with a dose of oil, enough to move the bowels. The foreign substance will be wrapped up in the potato, and come away without doing any harm. Remember this.

KEROSENE FOR ASTHMA.

The way to use it: Apply it to the neck and chest twice a day, rubbing it in well. Then place some of the kerosene in each hand, using friction for a few moments. Do this standing up, and then inhale it into the lungs—the fumes—repeating it every three hours for the first two or three days, and then three times a day and before retiring at night. In some cases it is effectual immediately, but in bad cases it may take a week or two to cure it; but it will be effectual in almost every case.

HOW TO MAKE AN EXCELLENT LINIMENT FOR GENERAL PURPOSES.

To the yolk of two hen eggs, thoroughly beaten, add slowly one pint of good cider vinegar; stir in the vinegar slowly, and keep stirring the mixture to prevent any lumps forming, and stir till it is smooth; then add, stirring all the time, one pint of turpentine. Then put it into a bottle large enough that it may be shaken daily for several days, and it will form a white, pasty mass, and is excellent for every sort of painful affection, when

freely applied and the surface thoroughly rubbed, every few hours. Use it on all occasions, for man or animal, when soreness, stiffness or rheumatism is present.

If to the above there be added a half pint of oil of sassafras, a half pint of oil of hemlock, and four ounces of wintergreen, you will have one of the best liniments for general use on the market.

THE SALT WATER CURE FOR GOITER.

Make a brine strong enough to hold up an egg, and then wring cloths out of that brine, doubling the cloth or towel so as to cover the goiter and half-way around the neck, on either side of the neck, and cover all over this with a towel wrapped around the neck and put it on every night same way. Continue this every night until cured, which generally takes about three weeks. This is invaluable for it cures. Many other like conditions succumb to this same treatment.

POISONS AND THEIR ANTIDOTES.

Poison Oak.—*Grindelia robusta* 2 drachms, glycerine 2 ounces. Mix and apply to affected part three or four times daily. It cures.

FOR ALL POISONS TAKEN INTO THE STOMACH.

Use remedies to cause vomiting as quickly as possible.

A tablespoonful of salt in a pint of warm water, drunk, usually causes vomiting immediately. A tablespoonful of powdered mustard in a glass of water is a sure emetic.

After vomiting use fresh milk, white of eggs, sweet oil, lard, or any other oil or butter.

Arsenic: Use albumen of eggs, sweet milk, sweet oil, lard at once, freely. Carbonate of iron, half teaspoonful in water.

Tartar Emetic-Antimony: Give tannic acid or green tea, strong.

Verdigris—Lunar Caustic: Corrosive Sublimate:	}	Mix whites of a dozen eggs in water, two pints; give a glass full every two minutes, till the stomach will contain no more. If there are not eggs enough, use sweet milk. Wheat flour mixed with milk is good.
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Lunar Caustic: The antidote is a strong brine of salt; take in stomach as soon as possible. (The above is nitrate of silver.)

Strychnine: Give two teaspoonfuls of common baking soda in water. This is said to be a certain antidote. Common salt is also a sure antidote used freely internally.

Sugar of Lead: Excite vomiting. Then give Epsom Salts, diluted sulphuric acid, mixed with the salts, Castor oil or solution of alum.

Shell-fish, or Ptomaine Poison: Excite vomiting. Then give dry on tongue, one to four ounces of cream of tartar, using no water for half an hour afterward.

Opium—Morphine: Use stomach pump. Then give strong coffee, lemon juice. A solution of permanganate of potash is a perfect antidote to the morphine or opium poison, injected into the deltoid muscle. Be sure to keep patient awake and use artificial respiration if needed.

Phosphorus: Give milk and magnesia, sweet milk, mucilages, but no grease of any kind.

Carbolic Acid: Give oil, glycerine, flour and water, white of eggs, magnesia, flaxseed tea, vaseline.

Lye: The remedy is vinegar or oil.

Sulphuric Acid (Oil of Vitriol): Soap-suds, wood ashes, mixed with water, carbonate of magnesia, chalk or lime water, and let patient use milk.

Nitric Acid (Aqua Fortis): Strong soap and water is efficient. Aqua ammonia in water. Wood ashes and sweet milk are excellent.

Creosote: Starch, wheat flour mixed with water, white of eggs, milk, mucilaginous drinks. Stomach may be evacuated by stomach pump.

For Mad Dog Bite: Cord the limb; then pour muriatic acid on the wound—a few drops. This is said to neutralize the poison at once. It is said that to plunge the patient into water at 65 degrees, regardless of remonstrance, not letting the patient know anything about it before plunging, and prepare the bath without patient hearing the sound of the water. Repeat the bath when symptoms of a paroxysm appear.

The above will be sufficient for this book. There are many

other poisons in the world but the student should know the most important ones which are liable to occur at :

THE KIND AND USE OF A VIBRATOR—THE SH:

This machine is the most satisfactory I have used and I generally use it after giving the patient vibrating the entire spine and extending doing using vibrations longer than about fifteen seconds at one sitting. It assists the metabolism of the system and thereby relieves the pressure from end n

FOR LA GRIPPE.

After adjustment at the fourth dorsal, fifth dorsal and the twelfth, give your patient half a teaspoonful of baking soda in a half glass of water three or four hours, and that will save the patient the treatment at the office. Remember this

CAYENNE PEPPER.

Some of its uses.— Agargle made as follows for sore throat: Two teaspoonfuls of common salt and two of fine salt; mix. Add one half pint of water, shake thoroughly, then strain it, and add half pint of vinegar. Bottle for use. Dose: Half teaspoonful to a glass of water one or two hours, and use it freely to the same effect as a gargle, frequently. Taken in the form of capsules with cream, in doses of a few *grains* to evening, it is an excellent stimulant. Mixed with lard or olive oil and rubbed to the surface, it is excellent in many conditions of the *bottoms* of the *feet*, as an ointment, it will cure *cold feet*. Mixed with turpentine and rubbed to the surface it is said to *discuss them* (make them absorbent). This compound is excellent for sore throats, as well as for colds, hoarseness, female obstructions (due to inflammation), piles (as a wash), liver complaints, etc. Mixed with molasses, or steeped in vinegar, it makes a good tonic. It is not poisonous, therefore may be used with impunity.

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