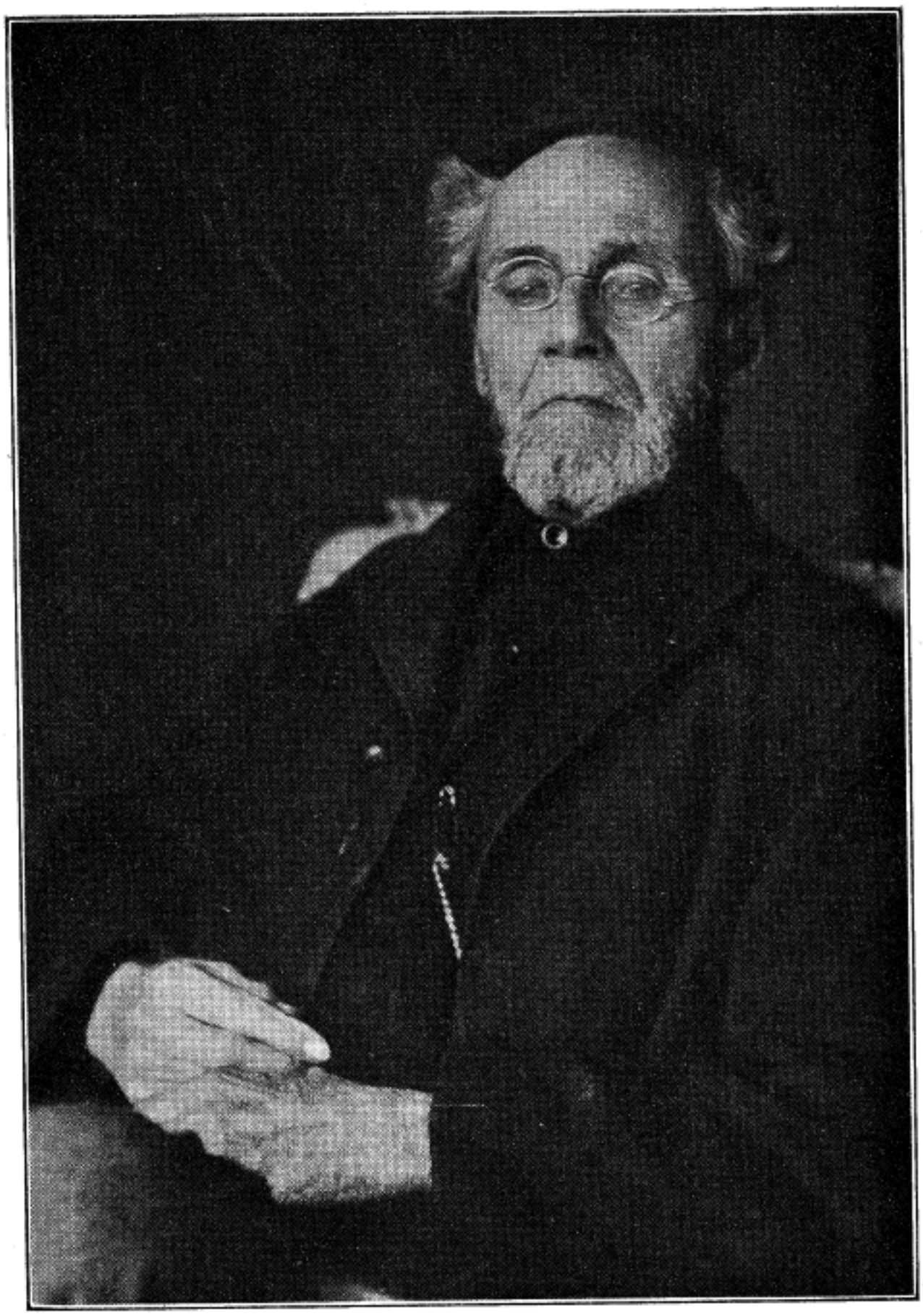
CONCERNING OSTEOPATHY

REVISED EDITION



Copyright by Yale Studio *Reproduced by Special Permission*

DR. A. T. STILL AT AGE OF EIGHTY-SIX

FOUNDER OF OSTEOPATHY

1830-1917

"I love my fellow man because I see God in his face and his form."

CONCERNING

OSTEOPATHY

A COMPILATION OF SELECTIONS FROM ARTICLES PUBLISHED IN THE PROFESSIONAL AND LAY PRESS WITH ORIGINAL CHAPTERS

S. DETWILER, D. O.
444 WATERLOO ST.
LONDON, CANADA

BY

GEORGE V. WEBSTER, D.O.

AND SPECIAL ARTICLES BY MEMBERS OF THE PROFESSION

ILLUSTRATED

1921

COPYRIGHT, 1910, 1915, 1917, 1919, 1921
BY GEORGE V. WEBSTER, D.O.

THE·PLIMPTON·PRESS
NORWOOD·MASS·U·S·A

TO HIM
TO WHOM HEALTH IS WEALTH
THIS VOLUME IS DEDICATED

PREFACE

THE purpose of this volume is to reflect the position occupied by Osteopathy as a system of therapy. Osteopathy is the name applied to that school of practice of the healing art which has developed as the result of the theories and discoveries of Dr. Andrew Taylor Still. The two basic theories, first propounded by Dr. Still, and forming the tenets upon which the osteopathic school rests are: first, the theory of the mechanical lesion as a cause of disease; and, second, the theory that the normal chemical body is practically immune.

Osteopathy has so demonstrated its usefulness to mankind that a spirit of inquiry has been aroused as to just what Osteopathy is, what it has done and what may be expected of it. With a view to preparing a volume which may in a measure provide the information desired, these pages have been arranged.

Little originality of text has been attempted, but, rather, in the review of the osteopathic literature that has appeared from time to time in the professional and other publications, an effort has been made to select such articles as seem appropriate for this volume. These, in

some instances rearranged and condensed to omit technicalities, have been compiled in a more or less logical order, giving the history of Osteopathy, its development as a science, an exposition of its theories, some of its practical workings and something concerning its founder, Dr. Andrew Taylor Still.

Acknowledgment is here made of the courtesy of the several publishers for the permission granted to select from their pages such articles and quotations as appear in this book. Where possible, credit has been given both to author and to publication.

I am indebted to Dr. J. Deason, for contributing an original chapter; to Drs. Asa Willard, Carl P. McConnell, Geo. A. Still, R. H. Williams and R. E. Hamilton for revision of chapters; to Drs. Mina Abbott Robinson, Roberta Wimer-Ford and E. E. Tucker for revision of articles; to Drs. G. W. Riley, A. G. Hildreth and J. Deason for statistical information, and to many other professional friends for valuable aid and suggestions relative to the revision.

G. V. WEBSTER

CARTHAGE, N. Y.
June 1, 1919

TABLE OF CONTENTS

	PAGE
OSTEOPATHY AND TRUTH. A. T. STILL, M.D., D.O. . .	13
HISTORY OF OSTEOPATHY. ASA WILLARD, D.O.	17
HOW I CAME TO ORIGINATE OSTEOPATHY. A. T. STILL, M.D., D.O.	27
WHAT OSTEOPATHY IS. CARL P. MCCONNELL, D.O. . .	41
THE POINT OF DEPARTURE BETWEEN OSTEOPATHY AND MEDICINE. E. E. TUCKER, D.O.	49
DISEASE FROM AN OSTEOPATHIC VIEWPOINT. M. F. HULETT, B.S., D.O.	65
WHAT OSTEOPATHIC LESIONS ARE. G. M. LAUGHLIN, M.S.D., D.O.	77
MANNER OF TREATMENT. G. V. WEBSTER, D.O. . . .	83
A DIFFERENTIATION:	
Differences Between Osteopathy and Massage. A. T. STILL, M.D., D.O.	93
An Illustration. ASA WILLARD, D.O.	94
SCIENTIFIC PROOFS OF OSTEOPATHY. G. V. WEBSTER, D.O.	99
A SUMMARY OF OSTEOPATHIC RESEARCH WORK. J. DEASON, M.S., D.O.	113
THE OSTEOPATHIC EDUCATION:	
Osteopathy, A Distinct School. C. P. MCCONNELL, D.O.	121
Osteopathic Teaching. C. C. TEALL, D.O.	122
The Osteopathic Curriculum. R. H. WILLIAMS, D.O.	124
APPLICATION OF OSTEOPATHIC PRINCIPLES. G. V. WEBSTER, D.O.	133
Diseases of the Nervous System	134
Diseases of the Digestive System	136
Diseases of the Respiratory System	138
Diseases of the Circulatory System	140
Diseases of the Kidney	143
Diseases of the Pelvic Organs	144

TABLE OF CONTENTS

Diseases of the Skin 147
Acute Infectious Diseases 148
Diseases of the Eye and Ear 150
Constitutional Diseases 153
THE GROWTH OF OSTEOPATHY. A. G. HILDRETH, D.O.. 159
OSTEOPATHIC STATISTICS. G. V. WEBSTER, D.O. 167
OSTEOPATHIC INSTITUTIONS. C. M. T. HULETT, D.O. . 175
OSTEOPATHY AND SURGERY. GEO. A. STILL, M.S., M.D., D.O. 183
HOW OSTEOPATHY TREATS THE BLOOD. C. P. MCCONNELL, D.O. 189
OSTEOPATHY AND THE GERM THEORY. R. E. HAMILTON, M.PD., D.O. 197
THE VALUE OF OSTEOPATHY TO THE CHILD. MINA ABBOTT ROBINSON, D.O. 207
WOMAN AND OSTEOPATHY. ROBERTA WIMER-FORD, D.O. 211
OSTEOPATHY A PREVENTIVE OF DISEASE. G. V. WEBSTER, D.O. 217
A COMPARISON. C. B. ATZEN, D.O. 225
THE RESULTS OF OSTEOPATHIC PRACTICE. G. V. WEBSTER, D.O. 229
OSTEOPATHY IN THE FUTURE. RUSSELL DUANE 235

ILLUSTRATIONS

DR. ANDREW TAYLOR STILL . . . . . *Frontispiece*
OSTEOPATHIC HOSPITAL AND SCHOOL AT KIRKSVILLE, MO. 35
THE MASSACHUSETTS AND PHILADELPHIA COLLEGES . . 115
THE CHICAGO COLLEGE OF OSTEOPATHY 127
COTTAGE IN WHICH OSTEOPATHY WAS FIRST TAUGHT . . . 161
STILL-HILDRETH SANATORIUM 177
OSTEOPATHIC COLLEGES AT DES MOINES AND LOS ANGELES 201
THE "OLD DOCTOR" STUDYING THE FEMUR 221

OSTEOPATHY AND TRUTH

[Reprinted by permission from the Journal of Osteopathy]

From an address by Dr. ANDREW TAYLOR STILL *delivered on his eightieth birthday.*

I am sure that no man of brilliant mind can pass this milepost and not hitch his team and do some precious loading.

— A. T. STILL

Osteopathy is the knowledge of the structure, relation and function of each part of the human body applied to the adjustment or correction of whatever interferes with the harmonious operation of the same.

— G. V. Webster, D.O.

OSTEOPATHY AND TRUTH

BY ANDREW TAYLOR STILL, M.D., D.O.

WHILE for years I fought the battles of Osteopathy alone, meeting great opposition and vilification, I knew I had the truth and that the truth was immortal and that some day the principles of Osteopathy would be hailed with gladness throughout the earth. The principles are in harmony with the great laws of God as seen in Nature. Osteopathy deals with the body as a perfect machine, which, if kept in proper adjustment, nourished and cared for, will run smoothly into ripe and useful old age. As long as the human machine is in order, like the locomotive or any other mechanical product, it will perform the function which it should. When every part of the machine is correctly adjusted and in perfect harmony, health will hold dominion over the human organism by laws as natural and immutable as the laws of gravity. Every living organism has within it the power to manufacture and prepare all chemicals and forces needed to build and rebuild itself. No material other than nutritious food taken into the system in proper

quality and quantity can be introduced from the outside without detriment. A proper adjustment of the bony framework and the soft structures of man's anatomical mechanism means good digestion, nutrition and circulation, health and happiness.

Osteopathy is not a theory, but a demonstrated fact. You may say there are some failures. Yes, who would not expect it? We are called to treat people who have been poisoned and diseased beyond the possibility of anything except a little temporary relief. Or perhaps the Osteopath is not able to apply the knowledge he should have gained before being granted a diploma from an osteopathic school. This reflects no more upon the science of Osteopathy than does the farmer who fails upon the science of farming. Again many are looking for miracles and are disappointed when a few treatments fail to bring wonted strength and vigor.

HISTORY OF OSTEOPATHY

[Reprinted by permission from the Journal of Osteopathy]

* * *

The philosopher begins an ignorant man, knows this to be his condition and uses the many methods that occur to his mind to better his condition by a knowledge of demonstrated truths.

—A. T. STILL

The starting point of medicine is further back in history; the starting point of Osteopathy is further back in Nature.

— E. E. Tucker, D.O.

HISTORY OF OSTEOPATHY

BY ASA WILLARD, D.O.

THE early history of Osteopathy is the history of one man, its founder, Dr. A. T. Still. Its principles were first put forth by him in 1874.

Dr. Still was a regular practising physician and during the war, an army surgeon. He was born in Virginia, his father being a minister. The family moved west and Dr. Still, during his early life, experienced all the perils and hardships of pioneer life.

Dr. Still was always of an observing, investigating turn of mind. An incident illustrative of this is told of his boyhood days. After playing hard, he was often troubled with a headache. One day he lay down under the swing tree, with the back of his neck slung in the swing rope which almost touched the ground. He fell asleep. When he awoke, he found that his headache was gone. They usually lasted him a good while and he got to thinking of it. After that when he had a headache, he went to the swing rope. Of course, all he knew about the procedure then or for years afterward was that the headache stopped. The

treatment, however, was rational and its results can be explained physiologically. The pressure of the rope simply caused the tissue at the back of the skull to relax and allow the congesting blood to flow from the head.

In the early seventies, Dr. Still had three children die from spinal meningitis, in spite of the employment of every means known to medical science at that time. This experience seemed to thoroughly confirm him in the view that something was lacking in the accepted mode of treating disease. He began devoting almost his whole time to the study of the human body and investigating along lines that suggested themselves to him. He dissected animals and dug the bones from old Indian graves to get material for his study. His "bag of bones" came to be a joke throughout that part of Kansas, in which state the Still family then lived.

In his autobiography, he says of his study of the body of man, "By the use of the knife and the microscope I have traced for these many years the wonderful and perfect work therein found, carefully inspecting every fiber, gland and all parts of the brain; I have observed the construction of the parts and their uses."

Great thoughts do not come spontaneously, but the basic idea may, after years of study, come in a moment to the investigator. In 1874

Dr. Still grasped the pivotal truth of Osteopathy and that year he calls the birth year of the science. He began devoting his whole time to the development of his science and as he did so he experienced that derision and ridicule which have always been the lot of those whose discoveries have meant radical departure from the established ideas.

When, in the seventeenth century, Harvey discovered and proclaimed how the blood circulated from the heart through arteries and veins, he was designated as "crazy" by his medical brethren and ostracized from medical societies. Such was the treatment accorded Dr. Still.

His medical friends sneered at him and when he made efforts to explain to them his discovery they refused to listen to his "crazy" talk. He lost practice, his friends fell away from him. He was well to do and had accumulated considerable property in Kansas. He and his brother had donated 480 acres of land for the site of Baker University at Baldwin, Kansas. When he asked the privilege of explaining Osteopathy at the University, the doors of the structure he had helped to build were closed against him. He gradually lost his property and with his family moved to Missouri. For about ten years he traveled over the state visiting patients in various places. At times he actually wanted

for life's necessities. He finally located in Kirksville, Mo., and practised there and throughout the surrounding country. His work was almost entirely confined to the poor and very little of it was paid for. Every now and then, rumors of some wonderful cures which he had performed pervaded the community. Among those whom he had cured, he had loyal friends, but in the main the community referred to him as "that old quack, Still" and they attributed what success he had to faith cure, mesmerism, etc. "Doctor," a lady said to him one morning, "Now, be honest with me; isn't your success due to hypnotism?" "Well, madam, it may be," replied the doctor, "I've set three hips already this morning."

In spite of the aspersion and ridicule heaped upon him and the difficulty of making both ends meet, he was always cheerful and optimistic and eternally confident of the world's ultimate recognition of Osteopathy. There was always a oneness of purpose in his work. This, combined with a heart filled with charity, seemed entirely to exclude all thoughts of money matters or personal aggrandizement.

I remember an incident in my own acquaintance with him which was illustrative of this and which occurred a few years after he had started his school. I was sitting with him on his back porch

and, with an open anatomy in his lap and a skeleton at his side, he was explaining to me some point of the bodily structure. A little crippled girl on crutches came around the corner of the house. She was a charity patient. "Oh, yes, I want to look after this little girl. Now you see" — and he then entered into an explanation of her condition and how it could be corrected. While he was talking, his wife came to the door and said, "Pa, Senator ——'s wife is waiting for you in the parlor." "All right, in a minute," said the Doctor, and, with one hand on the little girl's back, he went on explaining. After a while, concluding with, "Now we'll go over to the school," he started for the school, having to be reminded again of the lady who was waiting for him in the house. He had become so interested in the little crippled charity patient that he had forgotten all about the United States Senator's wife whose husband was one of the most influential men in the country.

Hard work, persistence and self-sacrifice finally won. Occasionally some person of prominence became interested. His theory was so rational that these brought others. In spite of the fact that his patients were almost entirely from those claimed as hopelessly incurable by the old method of healing, some of his cures were marvelous. People began to be attracted from distances and

the "Old Doctor" with his two oldest sons, Charlie and Harry, soon had as much practice as they could attend to.

In 1892, he established a school. Many of his friends tried to deter him, some thinking his ability was a gift and could not be imparted to others. Others said that he was a fool; that after all these years of struggle, he ought to hold on to his secret himself and become wealthy. But money was the last thing about which Dr. Still thought. After the establishment of the school, although opposition by no means ceased, recognition came more rapidly.

Unlike the vast majority of the great who have made revolutionary discoveries of benefit to mankind, he lived to see the fruit of his labors — to see his science generally recognized. He died December 12, 1917, and would have been ninety years of age at his next birthday. Admired as a scientist, he was loved as a man. In the little city of Kirksville, where he lived, the citizens referred affectionately to him as the "Old Doctor," and many there are who will keep him in life-long, loving memory. His staff laid down, his labors ended, it can be said of him as it was said of another: "Were everyone to whom he did some loving service to bring a blossom to his grave, he would sleep beneath a wilderness of flowers."

A brief outline of the present status of Osteopathy will serve to show the remarkable progress made by this system of healing since the first school was established in 1892, — a progress unequaled in a like period of time by any system which the history of the healing art records. The first class, enrolled in the school which Dr. Still established in 1892, numbered eighteen. The classes were conducted in a two-room frame cottage which today looks across the street toward a four-story building which houses complete laboratories and facilities for instructing the seven hundred osteopathic students of The American School of Osteopathy. By the side of this building is a large hospital, one of the best equipped and most efficiently managed of any in the country.

Since the establishment of this school, other well equipped osteopathic schools have been established and modern osteopathic hospitals are run in connection with them. Besides the American School of Osteopathy at Kirksville, Missouri, there are now: The Massachusetts College of Osteopathy at Boston, Mass.; Philadelphia College of Osteopathy at Philadelphia, Pa.; Des Moines-Still College of Osteopathy, Des Moines, Ia.; The Kansas City College of Osteopathy and Surgery and the Central College of Osteopathy, Kansas City, Mo.; Chicago College of Osteopathy, Chicago, Ill., and the College of Osteopathic

Physicians and Surgeons at Los Angeles, Cal. In addition to these schools, the profession has established the A. T. Still Osteopathic Research Institute, at Chicago, Ill. Already an endowment fund of $100,000.00 has been subscribed for its support. That it may be of the utmost efficiency in developing the humanity-benefiting truths promulgated by the founder of Osteopathy, it is the intention of the osteopathic physicians and their friends to raise $1,000,000.00 for its endowment.

There are today seven thousand osteopathic physicians practising their profession in the United States and Canada, and the profession has representatives in all of the leading foreign countries. Its practitioners have been accorded legal recognition in all of the states and in a number of the Canadian provinces. In many instances they have been granted independent State Examining Boards.

The national organization of the profession, the American Osteopathic Association, enrolls over fifty per cent of all graduate Osteopaths. An examination will show that this percentage of the active membership in a profession's national organization is paralleled by no other profession in the world. The profession's increase and progress simply indicates the public acceptance of the osteopathic idea.

HOW I CAME TO ORIGINATE OSTEOPATHY

[Reprinted by permission from the Ladies' Home Journal]

* * *

I first saw the tracks of God in the snow of time. I followed them.

— A. T. STILL

DR. S. DETWILER, D. C.
444 WATERLOO ST.
LONDON, — 9 CANADA

Tradition has been the everlasting parent of tyranny.

— A. T. Still

HOW I CAME TO ORIGINATE OSTEOPATHY

By ANDREW TAYLOR STILL, M.D., D.O.

MY first awakening to the principles which today have culminated in the science called "Osteopathy" came when I was about ten years old. I was a boy on my father's farm in Macon County, Missouri. I was subject to sick headaches, and while suffering from one of these attacks one day I was instinctively led to make a swing of my father's plowline between two trees. My head hurt too much to make swinging comfortable. I let the line down to within eight or ten inches of the ground, threw the end of a blanket on it, and lay down on the ground, using the line for a swinging pillow. To my surprise I soon began to feel easier, and went to sleep. In a little while I got up with headache and fever gone. This discovery interested me, and after that, whenever I felt my headache spells coming on, I would "swing my neck," as I called it.

The next incident which gave me cause for thought occurred when I contracted dysentery,

or flux, with copious discharges mixed with blood. There were chilly sensations, high fever, backache and cold abdomen. It seemed to me my back would break, the misery was so great. A log was lying in my father's yard. In the effort to get comfort I threw myself across it on the small of my back and made a few twisting motions, which probably restored the misplaced bones to their normal position, for soon the pain began to leave, my abdomen began to get warm, the chilly sensation disappeared, and that was the last of the flux.

MILL MACHINERY INTERESTED ME

My father, as a pioneer, was a farmer, a mill owner, a minister and a doctor. I studied and practised medicine with him.

Pioneer life on a Western farm in those days was such that all the inventive powers one might possess were given ample chance to show forth. There was very little to buy and less money to buy it with. My father had a grist and saw-mill run by water, in the working of which I became very much interested. Later, I bought an interest in a steam sawmill, and took a course of instruction in milling machinery for practical purposes.

As I studied this mill machinery I got my first clear idea of the machinery of the human body.

My mind invariably associated and compared the machinery of the mill with the machinery of the human being: with the drivewheels, pinions, cups, arms and shafts of the human, with their forces and supplies, framework, attachment by ligament and muscle, the nerve and blood supply. "How" and "where" the motor nerves receive their power and motion, how the sensory and nutrient nerves act in their functions, their source of supply, their work done in health, in the parts obstructed, parts and principles through which they passed to perform their duties of life — all this study in human mechanics awoke with new vigor within me. I believed that something abnormal could be found which, by tolerating a temporary or permanent suspension of the blood in arteries or veins, would produce the effect which was called disease.

With this thought in mind came such questions as: What is disease? What is fever? Is fever an effect? I took disease to be an effect, experimenting and proving the position, being sustained each time by Nature's response in the affirmative.

Early in the sixties I took a course of instruction in the Kansas City School of Physicians and Surgeons, studying such branches as were taught in the medical schools of that day. I took up the regular practice of an allopathic physician. I was called a good doctor.

"THE PROPER STUDY OF MANKIND IS MAN"

During all this time I had devoted a large part of my time to the study of anatomy, which attracted me strongly. I read every book on the subject I could get hold of, but my chief source of study was the book of Nature. I found myself more and more believing that "the proper study of mankind is man," and the best method to pursue it is to dissect and study the body itself. The skinning of wild animals in my youth brought me into contact with muscles, nerves and veins.

The skeletons of the Indians were my next study in bones, and I went on making numberless experiments with bones until I became very familiar with the entire bony structure of the human body. Finally, I tried an experiment of my own: I made a picture or chart of the bones of the whole body, then stood blindfolded, or with my back to a table. A bone would be handed to me by an assistant. I would take it in my hands and by the "feel" of it would name it and direct where it should be placed on the chart (right or left). I carried this to the extent of even the smallest bones of the hands and feet and those of the spine, until the chart was filled in completely. This I used to do over and over again. For not less than twelve months I studied bones alone,

before taking up Descriptive Anatomy, because I wanted to know what a bone is and its use. I became as familiar with every bone as I was with the words "father" and "mother." Of course all this meant untiring work, and I have hardly expected my students to follow me over the entire length of this portion of my road. Nevertheless, I believe as strongly today as ever that the closer they follow this road, the better for their patients. They must study and know the exact construction of the human body, the exact location of every bone, nerve, fiber, muscle and organ; the origin, the course and flow of all the fluids of the body, the relation of each to the other and the function it is to perform in perpetuating life and health. In addition, they must have ability to enable them to detect the exact location of any and all obstructions to the regular movements of this grand machinery of life, and supplement this ability with skill to remove all such obstructions.

From this study in bones I went on to the study of muscles, ligaments, tissues, arteries, veins, lymphatics and nerves.

I began now to feel that I was irresistibly headed for some road: what road I myself knew not. Of one thing I was certain: I was getting farther away from the use of medicines in the treatment of ills and ails. I was a physician of the old school in name but not in fact.

I carried on my theories: I practiced them wherever I could find people who would place confidence in me, until the Civil War came on. Then I enlisted and went "to the front."

On resuming my duties as a private citizen after the war, I took up again the study and research of my all-absorbing topic: how to cure disease without medicine, and on June 22, 1874, there came into my mind the first clear conception of the practical workings of what is now known as the Science of Osteopathy. This day I celebrate as its birthday.

ONE OF THE FIRST CASES I TREATED

In the autumn of 1874 I was given a chance to try my ideas on a case of flux. I was walking with a friend on the streets of Macon, Missouri, in which town I was visiting, when I noticed in advance of us a woman with three children. I called my friend's attention to fresh blood that had dripped along the street for perhaps fifty yards. We caught up with the group and discovered that the woman's little boy, about four years old, was sick. He had only a calico dress on, and, to my wonder and surprise, his legs and feet were covered with blood. A glance was enough to show that the mother was poor. We immediately offered our services to help the boy home. I picked him up and placed my hand on

the small of his back. I found it hot, while the abdomen was cold. The neck and the back of the head were also very warm and the face and nose very cold. This set me to reasoning, for up to that time the most I knew of flux was that it was fatal in a great many cases. I had never before asked myself the question: What is flux? I began to reason about the spinal cord which gives off its motor nerves to the front of the body, its sensory to the back; but that gave no clew to flux. Beginning at the base of the child's brain, I found rigid and loose places in the muscles and ligaments of the whole spine, while the lumbar portion was very much congested and rigid. The thought came to me, like a flash, that there might be a strain or some partial dislocation of the bones of the spine or ribs, and that by pressure I could adjust the bones and set free the nerve and blood supply to the bowels. On this basis of reasoning I treated the child's spine, and told the mother to report the next day. She came the next morning with the news that her child was well.

There were many cases of flux in the town at that time and shortly after, and the mother, telling of my cure of the child, brought a number of cases to me. I cured them all by my own method and without drugs. This began to stir up comment, and I soon found myself the object of curiosity and criticism.

Another case which I was asked to see brought upon me still further criticism. A young woman was suffering with nervous prostration. All hope had been given up by the doctors, and the family was so told. After a number of medical councils her father came to me and said: "The doctors say my daughter cannot live. Will you step in and look at her?" I found the young woman in bed, and from the twisted manner in which her head lay I suspected a partial dislocation of the neck. On examination I found this to be true — one of the upper bones of her neck was slipped to one side, shutting off, by pressure, the vertebral artery on its way to supply the brain. In four hours after I had carefully adjusted the bones of her neck she was up and out of bed.

WHY I STARTED A SCHOOL OF OSTEOPATHY

I went through those interesting yet trying days deaf to criticism and comment. I worked alone, studying, investigating, experimenting.

Gradually people began coming to me in increasing numbers, and soon I found that my practice was beginning to grow beyond the limits of my strength. Several persons, seeing my increasing practice, now began to urge me to teach them a knowledge of the practical workings of my discovery. In the early nineties I concluded to



View of the Hospital and School Buildings at Kirksville, Mo.

S. DETWILER, D.
444 WATERLOO ST.
LONDON, CANADA

teach others the principles that underlay my drugless work. I realized that I must have help or break down. I had four sons and one daughter, able-bodied young people, and the thought came to me to educate them in this science in order that they could assist me in my work.

I employed the best talent that I could find to teach them anatomy, physiology and chemistry, teaching them, myself, the principles and practice of my own science. After my school had been in running order a short time others became interested and asked permission to join, and the class increased in numbers. At the end of the first year I had some students who were able to help me in a way, and in the course of two years I really had assistance. This was the origin of what is known today as the "American School of Osteopathy."

With the origination of the school came, of course, the necessity of a name to designate the science, and I chose "Osteopathy." I reasoned that the bone, "osteon," was the starting point from which I was to ascertain the cause of pathological conditions, and I combined the "osteo" with "pathy."

So "Osteopathy," sketched briefly, was launched upon the world.

NOW WHAT IS OSTEOPATHY?

Many people naturally ask: "What is Osteopathy?"

Osteopathy is simply this: The law of human life is absolute, and I believe that God has placed the remedy for every disease within the material house in which the spirit of life dwells. I believe that the Maker of man has deposited in some part or throughout the whole system of the human body drugs in abundance to cure all infirmities: that all the remedies necessary to health are compounded within the human body. They can be administered by adjusting the body in such manner that the remedies may naturally associate themselves together. And I have never failed to find all these remedies. At times some seemed to be out of reach, but by a close study I always found them. So I hold that man should study and use only the drugs that are found in his own drug store — that is, in his own body.

Osteopathy is, then, a science built upon this principle: that man is a machine, needing, when diseased, an expert mechanical engineer to adjust its machinery. It stands for the labor, both mental and physical, of the engineer, or Osteopath, who comes to correct the abnormal conditions of the human body and restore them to the normal. Of course, "normal" does not simply mean a re-

adjustment of bones to a normal position in order that muscles and ligaments may with freedom play in their allotted places. Beyond all this lies the still greater question to be solved: How and when to apply the touch which sets free the chemicals of life as Nature designs?

Osteopathy to me has but one meaning, and that is, that the plan and specification by which man is constructed and designed shows absolute perfection in all its parts and principles. When a competent anatomist (as the successful Osteopath must be), in treating the human body, follows this plan and specification, the result will be a restoration of physiological functioning from disease to health.

An Osteopath is only a human engineer who should understand all the laws governing the human engine and thereby master disease.

Tie a string around your finger — tight. What will follow? The finger will turn red, and then it will turn black. In time it will die, and perhaps in consequence you will die too. No treatment, internal or external, material or mental, can save your finger so long as the string remains. The only thing necessary is the removal of the string. This in a crude way illustrates the principle which is the basis of Osteopathy. This principle is that anything which interferes with blood currents or with nerve impulses must be overcome in order to secure health of the parts affected.

— E. M. Downing, D.O.

WHAT OSTEOPATHY IS

[Reprinted by permission from the Journal of Osteopathy]

* * *

When all parts of the human body are in line, we have perfect health. When they are not, the effect is disease. When the parts are readjusted disease gives place to health.

—A. T. STILL

Osteopathy is not a remedy. It is not a part of medicine or surgery. It is not a treatment for some particular class or group of diseases. It is a complete system of therapeutics applicable alike to all curable diseases.

— PERCY H. WOODALL, D.O.

WHAT OSTEOPATHY IS

By CARL P. McCONNELL, D.O.

THE science of Osteopathy primarily depends for its success upon a thorough and comprehensive study of the anatomy and physiology of the human body. Osteopathy has for its object the maintenance of the complete circuit of the motor, sensory and sympathetic nerves, to and from all the organs and tissues and the restoration of that harmonious action which must ensue when all parts are unirritated by any cause, thus permitting a perfect freedom of all fluids, forces and substances pertaining to life.

In the application of this knowledge to the healing art is where the School of Osteopathy differs from its predecessors. Osteopathy retains the knowledge gained in the medical world, but believes that the administration of drugs in a remedial sense is a mistake and that, by a thorough understanding of the mechanism of the human system, on an anatomical, physiological and hygienic basis, disease can be prevented or controlled in an exact and definite manner by the

application of principles peculiar to osteopathic practice.

More and more it is being realized that the use of drugs is not to be depended upon; and the intelligent physician, as well as layman, is not satisfied with the results. It is even questioned whether their use has not been more harmful than the sum of all the diseases of mankind.

Osteopathy, on the other hand, depends for its remedial effects upon the integrity of nature; consequently the Osteopath believes that the giving of drugs for the cure of human ills is unreliable and unscientific.

HUMAN SYSTEM COMPLETE IN ITSELF

The human system is a perfect organism, a universe within itself, and being complete has the recuperative power of Nature within it. If such were not the case, the human body would be incomplete, man would be obliged to seek extraneous aid in the alleviation of disease, and in such instance the use of medical agencies would probably be more of a success.

The first step in osteopathic attainment is an exhaustive knowledge of anatomical structures and the physiological functions of the human body. Then is observed the fact that man is a complete being, capable of performing his own mental and physical acts when in health; that

disease is simply evidence of disorder, and to restore health necessitates a correction of disordered parts.

The human organism contains the attributes of a physical mechanism. Vital functions are conditioned and amenable to the structural laws of physics. This fact determines the value of the science of Osteopathy — its practicalness. Herein is contained the essence of the art of Osteopathy.

In the restoration of health the Osteopath works entirely in harmony with nature, correcting disorders of mind and body upon a physical basis through the application of his knowledge of the laws and principles of the human body, thereby looking upon disease as some disorder of the normal function of the body, and not as an entity to be attacked by some foreign force which would only alleviate, antagonize or overshadow the real trouble.

EXAMINATION OF THE PATIENT

The patient is examined from a physical viewpoint. Pathological conditions and symptoms are used as clews to find the cause of the disease. Back of these signs and symptoms of the disease must be traced the origin of the nerve supply and the course of the blood channels from the parts diseased to the exact region, or primary lesion, causing the abnormal condition.

The cause of the disease may be a dislocated or sub-dislocated bone, ligament, cartilage, or muscle, producing an inhibition or irritation of a nerve fiber or causing obstruction to an artery, vein, lymphatic or some fluid of the body, thereby resulting in disorder to that part of the body to which the affected nerve or vessel is connected or distributed. When the point of exact cause of the disease is located, aid is given crippled nature in reëstablishing the normal activities of its forces.

OSTEOPATHIC TREATMENT

The mode of treatment is a scientific manipulation, applying the mechanical principle which is indicated in each separate case. Osteopathic treatment is not simply applicable to a particular line of diseases, but controls with precision and success all curable diseases of the entire category. Its newly discovered principles, peculiar to osteopathic practice, are of an unerring and comprehensive nature.

Osteopathy's laws and principles, being in harmony with, and, in fact, part of the infinite natural forces of life, show its predominance over all previous schools of medicine.

The Osteopath does not depend upon medicine to act upon the structure or function of the disordered tissue, for the diseased tissue is simply an effect, but he relies upon the natural forces

within the human body. He first corrects the structural deviations of any region that may be affected and thus restores physiological harmony to the diseased parts, and this being done, health must ensue.

A person walking over an uneven walk, may unexpectedly step in a depression and twist the spine. There is momentary pain that is soon forgotten. The injured place remains. The tissues become thickened. The movement of the joint is practically lost, the vertebral foramina are partly closed, and there is disturbance of function of everything in relation. The person may not be aware that it is tender until some osteopathic physician presses directly on the spot.

— M. E. CLARK, D.O.

THE POINT OF DEPARTURE BETWEEN OSTEOPATHY AND MEDICINE

[Reprinted by permission from the Osteopathic Magazine]

* * *

I felt I must anchor my boat to living truths and follow them wheresoever they might drift.

— A. T. STILL

The recognition of pressure as the cause and continuation of disease, and the adoption of manipulative measures for the relief of such pressure, are the essential characteristics that differentiate Osteopathy from all of the other therapeutic systems. Adjustment is the key-note of Osteopathy.

—**J. W. Banning, M.D., D.O.**

THE POINT OF DEPARTURE BETWEEN OSTEOPATHY AND MEDICINE

By E. E. TUCKER, D.O.

IN an open hearing before a committee of the State legislature of New Jersey, a question was asked by one of the members of the committee that went unanswered.

"What," said he, "is the point of departure between Osteopathy and medicine?"

If we are right in believing that all who think at all about Osteopathy ask themselves consciously or unconsciously the same question, then the answer will be pertinent here.

The most conspicuous point of departure is that the doctor of medicine gives medicine; the osteopathic physician does not, but instead corrects structural disorders, which the medical doctor does not, and leaves the rest to Nature. Many things they have in common, that is, they both correct bad habits, advise diet, use surgery occasionally, etc.

In his mind the average man asks why this

is a point of departure? Are the two systems not compatible?

They are incompatible. And they are incompatible practically, psychologically, historically, educationally, scientifically, and philosophically.

PRACTICAL POINT OF DEPARTURE

The osteopathic physician corrects disorders because he finds them. No other reason need be given. And he leaves the rest to Nature because he finds that that is all that is necessary. A purely practical thing is the practice of Osteopathy. The practice of medicine, on the other hand, uses medicines because it "believes" in them and because the authority of its school teaches them; that is to say, because such is the traditional practice of that profession. It is not because medicines have been found efficient. What the medical world really has found out about medicines is — that it has to keep on discarding them, and hunting for new ones.

PSYCHOLOGICAL

Is the use of the word "belief" here justifiable? I think it is, and incidentally it brings us to the psychological point of departure. "Belief" in drugs is buried centuries deep in the mind of the whole people. When some man becomes a doctor

of medicine, he carries this belief with him. It takes years of practical experience to shake it. As fast as the belief is destroyed at the top it is renewed again at the bottom.

Also one believes in what one does. The belief in drugs is a natural consequence, as well as the cause, of giving them.

No fault is to be found with the medical profession for this. The medical profession is merely that part of the great public which devotes itself to the care and the cure of disease along traditional lines. The fault, if it is a fault at all, is to be attributed to human nature — mystery-loving, miracle-loving, conservative — living nine-tenths in the shadows it has itself made.

HISTORICAL

The historical point of departure dates from the very beginning of Osteopathy. It was rejected by the medical profession. Dr. Still proclaimed his new discoveries to his brother practitioners of medicine of that time and place, and has continued to present them ever since. They were and are rejected as being impossible and absurd; which means that they are incompatible with the training of the medical mind and with the practice of the medical school.

Compelled thus to grow up outside the medical school, the new practice nevertheless continued

to develop until it became both a separate profession and a separate science. It cured and continued to cure those who came to it, many of whom thereupon became practitioners — practitioners on whom medicine and surgery had failed — and these helped to emphasize the difference between medicine and Osteopathy.

The strongest point in the historical departure was this, that Osteopathy had an opportunity at first with only those on whom medicines had failed; whereas medicine handled all cases as they came, of whom at least eighty-five per cent recover anyway, with or without medicine; for which nevertheless medicine gets credit. Thus only in the case of Osteopathy was there a fair test of value. This test was immensely favorable to the new system.

Its success, however, did not bring about the glad acclaim of the medical practitioners. Instead it hardened their hearts. Nor is this to be charged against them as a bad mark. It is not medical, it is human.

We are not under the necessity of apologizing for human nature; but it marks a point of departure between Osteopathy and medicine.

EDUCATIONAL

In its growth, therefore, Osteopathy followed the lines of least resistance and grew up a separate

system; though it is a matter of fact that another medical practitioner, from Edinburgh, a fellow of the Royal Society of Edinburgh, was farseeing enough to put the pressure of his undoubtedly great genius behind the anti-medical tendencies, to establish the independence of Osteopathy as firmly as he could. This man was William Smith, M. D., C. L., F. R. S. E., D. O. — of which titles he valued the last the most.

Far from being a disaster, this absolute division proved to be the finest thing possible for the new science. If, by new methods, the old ones could be shown unnecessary, then was the world so much the gainer; for the old ones were at all times dangerous, and, with the least incompetence, deadlier than the disease.

Thus the educational departure of the new system became absolute. This enabled the new system to carry its measures to the highest possible efficiency.

SCIENTIFIC

As to the scientific point of departure, a scientific criticism of Osteopathy by the medical profession was never made. This was at first galling to many members of the osteopathic profession, but it need not have been. The last possible thing that a crowd or any mass of men, or even a profession, is capable of, is scientific thinking. Science is an individual matter. With the mass of men,

taken as a whole, it is an art. And one art is typically jealous of the other arts. This the public does not see, of course, and it seems that the legal mind does not see it any more easily; for it has tried persistently to compel the two to mix.

But the science of Osteopathy also has its exclusiveness; and in spite of the excellence of many scientific minds in the medical profession, it is impossible for the science of Osteopathy to lessen the rigidity of its scientific exclusiveness. First the medical profession practically rejected the science of Osteopathy. Then finding itself isolated and defined, the osteopathic profession found also that it had in hand a science that would not mix with medicine. This is in no sense a personal or a professional matter — it is not the act of a man or men — it is a question of science. The osteopathic profession found its science positive. It found that it could harmonize its positive findings with the positive pathology of general science, and with its own therapeutic measures. It found that it could not harmonize the definite and positive facts and principles of its science with the guesswork of the medical practice. Osteopathy was positive and exceedingly helpful. Where its helpfulness failed and its logic would not reach, there it was admissible to have recourse to experiment again, as the world had always done

S. DETWILER, D.
444 WATERLOO ST.
LONDON, CANADA

— had always had to do. But in so far as there was a definite and positive thing, experimental practice was simply shoved farther away from the problem of disease.

So long as the medical profession held the medical system to be fundamental, to be curative and not merely experimental, to be positive and not merely palliative or an emergency system, so long was no compromise possible. This is, of course, a matter between the professions, not between the sciences. Science is impersonal and cannot take sides. It is a matter for proof, not for warfare; science cannot disagree with science. Scientists may dispute with scientists, however, and will to the end of time.

In practice, as all of the world knows, from the beginning up to the present time, the majority of the medical profession has acted upon this principle; it has claimed exclusive rights in therapeutics and in authority. It has again and again shown an inability to develop self-criticism. This is not the fault of the men but of the system, or perhaps one might say, of human nature. The whole spirit of the miracle-search is opposed to pure science or any science. Mystery and miracle go hand in hand.

But granting this fault in the philosophy and in the practice of medicine, is there yet no basis on which any of the great mass of work done by

medical men can be made available — can be found compatible with the osteopathic science? The omission of materia medica from osteopathic schools does not mean the omission of surgical and sanitary medicines nor is it to be understood as meaning necessarily a denial of any truth or value in materia medica. Science cannot take negative attitudes. It is, however, a very positive assertion of the superior value of osteopathic means and of the greater need of developing those means.

The contrast must be made between the traditional practice of medicine and the wonderfully valuable research work being done in the medical laboratories. Of this latter it is impossible to speak in terms of too high praise. The devotion and ability there has brought this age a degree of progress which must, when true perspective is obtained, stamp it as the great therapeutic age. The research that is of value, however, is that in physiology, biology, bio-chemistry and surgery, rather than in medicine. All the progress in medicine that is of value has come through surgery. Sanitation is a department of surgery, as are the wonderful agencies for the deadening of pain. In all of this Osteopathy rejoices and profits.

PHILOSOPHICAL [1]

The philosophical point of departure is no less definite and absolute.

In medicines and other systems we have experimental methods for curing diseases. Whether it be drugs or electricity or hydrotherapy or psychotherapy or any form of therapy, they are all attempts to make a wide or universal application of a thing that proved good in some cases. They are entirely experimental methods, merely trying for further results with little reference to causes, processes and laws which are almost entirely unknown.

They prove themselves mere methods, because they adopt other experimental methods and find no incompatibility in doing so. They prove themselves experimental methods in the very criticism their exponents make of Osteopathy, being unable to see in it anything but another mere method.

In contrast to these experimental methods stands the osteopathic practice, based on the actual facts discovered in the individual case, agreeing with biology and explaining pathology; moving not at all until it finds disorder and then only

[1] PHILOSOPHICAL is here used in its commonly accepted meaning as pertaining to the knowledge of the causes of all phenomena both of mind and matter, rather than in its strictly technical sense. — ED.

moving to correct this disorder and not allowing itself to be drawn into mere guesswork, preferring rather to leave all to the understanding of Nature except in so far as it can remove the causes of disease.

Osteopathy holds that since all the forms and processes in the body are the expression of laws, therefore disease also is the expression of laws, is a normal result of causes. Any attempt to cure except by removal of causes is an attempt to suspend the operation of law.

These two contrasting systems cannot live together in the same mind. Those schooled in experimental methods who have sufficiently considered the osteopathic doctrines are convinced by them, and become osteopathic physicians and cease to be "believers" in medicine or "believers" in anything else; but rise to the higher scientific plane of working with the facts and trusting in them.

Osteopathic philosophy is based absolutely upon this principle. It considers no move justifiable until that move can be based upon knowledge. It considers it rarely justifiable to interfere with or to suspend Nature's processes, for which she has reason; or to nullify her laws, which are the conditions under which she moves. All honor to scientific experimentation, but the worst pos-

sible travesty of science, the most pessimistic, indeed the most atheistic and chaotic attitude toward Nature, is that which justifies blind experiment in an ordered physiological being. No justification can be found for experimental methods, except in the absolute lack of sufficient knowledge of cause and effect, and then only in the effort to find such cause and effect. In fact, this effort is continued only because the public demands that some effort be made to cure or to discover a cure for their diseases.

The philosophy of the medical system, if it can be said to have a philosophy, seems to have been based upon the doctrine that everything made by the Creator was made for some purpose of man. Possibly most of us would agree with this, but when the medical profession goes on to assume that He put ready to our hands all the herbs of the field and all of the chemical and other forces of nature, therefore He meant that these be used for our relief in disease, we most heartily disagree. The logical fault of such a doctrine is that it has no virtue. As well say, twice two is a pot of beans. It has been broad enough, however, to justify almost any conceivable vagary that any dreamer with the medical degree could devise.

This philosophy can hardly be called a philosophy. It is merely an inheritance. What the

facts really are is as follows: In so far as it is a mystery the only way to reach it is through experiments. The public demands that some effort be made, and it loves miracles. The search for specific remedies is the search for a miracle. Mystery and miracle go hand in hand and must forever go hand in hand. This miracle idea is a lineal descendant of the Philosopher's Stone, with which students of history are familiar, the parent of alchemy and through alchemy the parent of medicine. The survival is not a science but a psychological phenomenon; not a fault of any group of men but an expression of human nature.

In contrast with this, the philosophy of Osteopathy asserts that since the majority of mankind remains healthy under given conditions, and one or two become sick under these conditions, therefore the power exists in the organism to remain healthy, and the reason why illness arises in some cases and not in others is to be sought for in some difference in those individuals. That difference is hunted for and found; and on it is built the practice of Osteopathy. Nature does not create functions to exist only as diseases. When disease does arise, it presents a question for determining what are the compelling causes. These compelling causes were found by Dr. Andrew Taylor Still to consist of actual disorders in the parts of the body. As such they

were studied. Thus developed the science of Osteopathy.

The philosophy of Osteopathy is the philosophy of fact. The osteopathic profession makes a positive diagnosis of actual disorders found in the structure of the body, affecting its functional balance. It makes a positive claim of being able to remove such disorders. It shows in terms of known physiology the relation between the disorders and the result. In most cases it presents records (made by men capable of making such records), of benefit or of cure, from the removal of these causes.

The great point of departure then between Osteopathy and medicine is that between a practical fact and experimental practice.

In Osteopathy not only was there an evolution but there was a revolution. Every system of treatment previously developed had been designed primarily to combat effects. Dr. Still's great work lies in the determination of cause, and through a knowledge of that cause, the application of an effective treatment.

— G. D. HULETT, B.S., D.O.

DISEASE FROM AN OSTEOPATHIC VIEWPOINT

[Reprinted by permission from the Journal of Osteopathy]

God's pay for labor and time is truth and truth only.

— A. T. STILL

Osteopathy walks hand in hand with nothing but Nature's laws and for that reason alone it marks the most significant progress in the history of scientific research.

— A. T. Still

DISEASE FROM AN OSTEOPATHIC VIEWPOINT

By M. F. HULETT, B.S., D.O.

THE history of medicine is a record of empirical practice upon an all too credulous public. Hoping for relief we grab at a straw. Promise of cure, though without a semblance of reason back of it, like the candle light to the moth, lures its victims by the thousands, heedless of the consequences. Unfortunately, disease has been too little understood — and its remedy less so. Too long has it been considered that disease is a mysterious, devouring monster, separate and distinct from bodily mechanism — an invader, usurper on a mission of destruction. Very naturally, with this conception as a premise, the search for curative measures has been largely confined to attempts to discover some agency that would drive out, absorb or annihilate this grim terror. This search is largely the history of medical therapeutics, its nostrums, its poisonous compounds, its serums, its germicides and much of its surgery, all pointing with unerring aim

to such a conclusion. Something, however, has been done in recent years on a more rational basis; but even yet not a small amount of this ancient superstition still remains.

It is a hopeful sign, however, to observe that the foundation of this false therapeutic structure is being undermined — is crumbling away. We are searching more deeply into the cause and studying less the effect (except as it points to a cause) and its remedy. It is gratifying to note, too, that this change is largely co-existent with the origin and development of Osteopathy. This science, making less prominent the effect, the symptom, and being satisfied with nothing short of the discovery of a first and primary cause, has done more to bring about a better understanding of the "human machine" in its relation to diseased (or disordered) conditions than any other one therapeutic system. Its viewpoint is from an entirely different field and we will endeavor to demonstrate that it has a more rational basis.

In order to understand better this new conception, let us for the moment forget all about Osteopathy which may, in our individual interpretation of its meaning, seem vague and indefinable, and, without being prejudiced, consider in a rational way a few well-known physiological principles.

Bodily tissues, muscles, glands, organs, etc. (without nerves to govern their actions) are inert, mere masses of matter, unresponsive and lifeless. Every movement of the body is the result of muscular contraction — an approximation of the different points to which the muscle is attached. But the muscle cannot contract itself; it has no inherent power to act, it lies there dormant until put into motion by an independent force. This force, generated in the brain, or other subsidiary center of origin, is transmitted along the nerve especially created for it to its point of action. Without this impulse, or stimulus, the muscle is helpless. This is true of all muscular contraction and is demonstrable beyond any question. A similar phenomenon is undoubtedly true of all other functions. For instance, the stomach secretes certain digestive fluids. In this process of secretion, the secreting gland acts, as does the muscle, only when influenced by the nerve impulse starting from its center of origin and terminating in the gland. In like manner, we can logically assume that every other tissue and organ exhibits similar phenomena. Even the blood and lymph circulation, on which bodily health so much depends, is similarly controlled. The heart, the greatest propelling force, is a muscular organ acting as do other muscles. The walls of the blood channels are everywhere supplied with

muscles and their governing nerves control their calibre, thereby regulating the quantity of fluid passing through them. Knowing these facts by practical experiment upon most of the bodily tissues, we dare assert that all function is governed by nerve stimulus, originating in the brain — or similar subsidiary center — and transmitted through the nerve to the organ or part.

With this conception of physiological function, we reasonably assume that health exists when functional life is normal — when the organ or part is in action in response to a normal nerve stimulus and that disease is the result of the opposite condition — a friction of parts, an interrupted nerve current and other causes to which these are contributory.

But why the opposite condition, this abnormal action? Let us consider for a moment a condition that might produce this friction, or interference with the nerve current. The human machine, as are other machines, is subject to certain mechanical laws which must be obeyed. On account of its delicate structure and sensitive nature, it is even more susceptible to a violation of these laws than is the mere mechanical device. A disturbance of the relation of the parts, even though slight, produces friction somewhere, or impedes or restricts the nerve current. This done, function is impaired or ceases in the organ

supplied by that nerve. The products of that organ become deficient in quantity or quality — often in both — or its power to excrete the poisonous bodily waste ceases. Disease results with severity in direct proportion to the importance of the function impaired, to the amount of destroyed tissue, or according to the amount of poisonous matter retained in the system. To restore health, function must be re-established. How shall this be done? We might cut away the diseased part; we might cauterize the area involved and cleanse it. But if we do nothing to re-establish the function, to adjust the structure interfering with that function, continued or progressive destruction must follow.

There is only one way in which tissue can be reconstructed. The work must be done by the natural tissue-building properties of the body, the normal blood and lymph and the products of digestion properly assimilated. No medicine will do this for the organ. The most expert chemist, with any possible combination of drugs cannot construct tissue — no drug or combination of drugs will build tissue. In order to heal a wound there must be brought to it, through the natural channels of the body, the tissue-building materials, food elements, the product of digestion.

Obstructions are referred to above. What are they? Why do they exist? How do they origi-

nate? What effect have they on functional life? For the purpose of this article reference to one class will suffice. The spine is composed of a number of bones, vertebrae, one upon the other, being so perforated that together they form a bony canal in which lies the spinal cord. A joint is formed at the juncture of each pair of adjacent bony segments of the spine. The spine, therefore, is a series of joints as well. Now the function of a joint is motion. This is what it is created for — movement. Sometimes this motion is impeded; sometimes it ceases altogether. Strains and injuries of various nature induce inflammatory action, forming adhesions or producing thickening of the component parts of the joints. This is one form of obstruction. The result is disease — disorder. But this obstruction in itself is not necessarily a serious condition. The stiffness of a single joint of the spine need not interfere with much bodily activity. The bending of the spine is not an absolutely essential element in life. But passing between adjacent vertebrae are two nerves, one on either side, the media through which is transmitted the energy governing other and often much more important functions. As the joint becomes restricted, ligaments around it contract and harden, excretions infiltrate the tissues and disturb or decrease the size of the passage in which the nerves lie to such an extent that all

nerve energy may there be dissipated. The organ supplied by such nerve, therefore, becomes inactive — its function ceases and its individual life is impaired. Again, since the spinal cord receives its blood supply — nutrition — through these same openings, most serious damage may result from a lack of blood there and a consequently starved nervous system.

Impaired motion of the spinal joints and the accompanying hindrance to the spinal cord circulation are not the only obstructions that may exist. Strains and contractions of muscles often cause various irregularities of the joints. A single vertebra may be "slipped" to the side (of course only slightly, otherwise severing the cord or causing a pressure upon it sufficient to produce paralysis at that point), a rotation may exist, or a slip or rotation of a series of vertebrae — thereby irritating, directly or indirectly, the nerves passing from the spinal cord, by drawing tight the vertebral ligaments.

Thus far, it has been the aim of the writer to make plain one form of "lesion" — "perverted structure which by pressure or other irritation produces or maintains functional disorder." It is not the intention so to confine the subject. There are other forms of lesion, many of them; but to go into detail with each class, since the principle is generally applicable, is useless.

The osteopathic viewpoint, therefore, is based in general upon the principle that "structure (anatomical relations) determines function." Health exists when there is harmony in structure. Disease follows disordered relations; or disease is the result of (first) structural derangement which inevitably produces (second) perverted or suspended function. (The writer is aware that abuse may modify function thereby originating pathological conditions, but that phase of the subject cannot be considered in the brief space allowed for this subject.)

Osteopathic therapeutics, therefore, depends upon the mechanical principle of adjustment of structure. It contemplates that the bodily functions are maintained by the harmonious, unrestricted action of all parts. The presence of disease indicates primarily structural derangement — interference with the free action of the vital forces. To locate this derangement, together with a consideration of all its associated consequences, constitutes the substance of the Osteopath's diagnosis. Then, his therapeutics is an adjustment, by manual operations, of that abnormal structure, adapted to the individual condition and varying according to the particular needs. When this adjustment is secured, by the removal of the obstruction and a consequent liberation of nerve energy — a restoration to normal func-

tion — nature rebuilds or restores the weakened tissue.

Nature always tends toward the normal so long as she has freedom of action. Her power to do this is inherent. There is no external force which will supply her demands in artificial doses. She needs no tonic or stimulant — no whip. All that is required is the freedom of action with which she was originally endowed by an all-wise Creator.

Dr. Still found that manipulation of the spinal column and its dependent tissues produced certain startling and special reactions, and this was strikingly the case whenever there was in the backbone any visible or palpable irregularity, lesion or deflection. His studies of the spinal mechanism led him to the conviction that virtually all so-called diseases, pains, symptoms and so on, were indirectly caused by these spinal lesions.

— M. A. Lane, B.Sc.

WHAT OSTEOPATHIC LESIONS ARE

[Reprinted from the Stillonian]

From Notes on a Lecture Delivered to the Stillonians

* * *

Man, the most complex, intricate and delicately constructed machine of all creation, is the one with which the Osteopath must become familiar.

— A. T. STILL

Osteopathy is the practical knowledge of how man is made and how to right him when he gets wrong.

— A. T. Still

WHAT OSTEOPATHIC LESIONS ARE

By G. M. LAUGHLIN, M.S.D., D.O.

FROM an osteopathic point of view, a lesion is any abnormality of structure which interferes with function. Do not get the idea that these lesions are great big things, that there must be a dislocated vertebra or rib, or a spinal curvature or some great abnormality in order to constitute a lesion. There are comparatively few lesions of that kind. When there is the least particle of abnormality of position of spinal structure or when there is a change in the relation of bones, ligaments and muscles, these conditions constitute lesions. We may have a rotation of a vertebra and that is a lesion; we may have a curvature of the spine and that is a lesion; we may have a straight spine and that is a lesion; a rigid spine, hardened or tensed muscles all constitute lesions. They are all lesions because they are abnormal structural conditions and interfere with the origin and transmission of nerve force.

We must recognize that the nervous structure is the master structure; nerve tissue the master

tissue. When there is anything wrong with the nerve impulses, some disturbance of function is going to occur. You all know that the nervous system is very much like an electric-light plant. The impulses originating in the central portion of the nervous system, the brain and spinal cord, are transmitted all over the body. The brain is the dynamo, the nerve fibers are the wires. In the electric-plant, if the dynamo should get out of fix, we could have no light; so if something is wrong with the nutrition to the brain or spinal cord, the impulses will not be normal. If the wires are broken or short circuited, the light goes out; so with the nervous system, if the nerves are impinged upon or irritated, of course there will be interference with function — the impulses will not be normal.

In order to have good digestion, good elimination, etc., we must have the proper distribution of nerve force and no interference with the nerves after they leave the central nervous system. Any of the lesions spoken of might interfere with the nutrition to the central system where the nerve cells are located. The spinal cord and brain must be nourished with good blood. The blood carries nutrition from the gastro-intestinal tract to the central nervous system. If there is any interference to the blood supply on account of spinal lesions, the nervous impulses will be weak

and the individual will not have good health. Wherever there is a lesion, there is obstruction; interference with the intervertebral foramina, interference with the vaso-motor nerves which control circulation and interference with the central nervous system.

We find the principal cause for most of our chronic ailments to be either reduction of vitality at the nerve center due to interference with nutrition or some mechanical interference with the nerves themselves.

All lesions found along the spine do not result from injury or trauma. Some do, of course, but most of them come on slowly; not in a day or a week and not because we step into a hole or fall. Most of them come on slowly and may be two, three, four, five or even twenty years in developing. Then how did they come about? Strain is one cause, overwork, exposure and many times infectious diseases, where the individual is extremely ill for a period of time; all these are causative factors which will produce a warping and twisting of the spinal column and bring about mal adjustment. Chronic diseases come on as a result of these slowly developing lesions.

In practically all cases where there is lesion, there is limitation of motion. The question is sometimes asked, "How are lesions maintained?" I have made the statement that we do not have

complete dislocation in order to have lesion, but limitation of motion which interferes with nutrition to the nervous system. As the lesion develops, the abnormal position produces a local irritation or inflammation. New tissue forms about the site of the lesion, causing adhesions at that point, and as these adhesions thicken, the ligaments and muscles lose their elasticity, stiffen and harden, maintaining the lesion.

In chronic diseases, by breaking up the adhesions, where there is fibrous tissue formed; by the establishment of motion, where motion is indicated, and by the correction of structure, we remove the interference to the nutrition to the nervous system so that impulses may be properly originated and properly transmitted and the organs perform their normal functions.

MANNER OF TREATMENT

* * *

Find it, fix it, and leave it alone.

— A. T. Still

Osteopathic treatment is scientific in that it recognizes the relation between cause and effect in disease, and seeks to remove the cause rather than to treat the symptoms — the effects of the disease.

— Orren E. Smith, D.O.

S. DETWILER, D.
444 WATERLOO ST.
LONDON, CANADA

MANNER OF TREATMENT

By G. V. WEBSTER, D.O.

THE object of osteopathic manipulations being largely to adjust the bony structures of the body to their proper relative position for the purpose of removing interference to the physiological action of organs and to promote the cure of disease, the manner of procedure is of interest.

The first consideration is the establishment of a correct diagnosis of the pathological condition, to which end the usual methods of physical and laboratory diagnosis may be employed. Having located the seat of the pathological condition and the extent of organic changes in the tissues of the body as far as possible, the next step is the analysis of the cause which might have led to the perverted functioning or to the organic change, determining whether motion, sensation or nutrition be interfered with. The avenues of travel for the impulses controlling each of these functions that may be found disturbed are then searched for possible cause of interruptions to the normal movement of such impulses, or for reflexes that might divert or augment them. The nerves and

blood vessels being seldom subject to abnormal pressure while passing through the softer tissues of the body, it is but reasonable to suppose that the most likely point of mechanical interference is at some point where they come into relation with the denser structures of the body. It is then the duty of the Osteopath to examine closely the relation of the vertebrae, ribs, innominates, etc., to find the exact point or points of interference to the forces that present evidence of disordered physiological action in the case at hand. In this the osteopathic method is peculiar, individual and distinct from all other methods of examination. The usual physical examination for the determination of the organ functioning improperly, guides the Osteopath to certain definite points along the spine where the nerves controlling that function center and, on the other hand, should the Osteopath make the spinal examination first his findings of structural deviations there would, according to their location, indicate to him more or less accurately the organs whose functions are disturbed.

So much for the diagnosis, and having established the same both pathologically and osteopathically, the Osteopath proceeds to treat the case along osteopathic lines in accordance with the findings, or he may refer the case to the best means available for the care of the conditions,

whether it be surgical, institutional or otherwise, as may be indicated.

Proceeding with the osteopathic treatment, for that concerns us most at this point, the patient, dressed in clothing that will permit of freedom of motion to the spine and extremities, occupies a sitting or reclining posture that will afford the greatest ease of operation for the physician and will allow muscular relaxation of the parts to be adjusted. The Osteopath uses his hands to make the adjustments. From his knowledge of the structures of the body and the relation of the parts under operation, he chooses a point to be used for a fulcrum, while the leverage necessary to place the structures in their proper relative position is usually obtained by the use as a lever of one or more of the bones adjacent to the point of lesion, or structural abnormality, which is the object of his attention. Not so much force as skill is required to bring about the adjustment desired. Each particular lesion requires a certain definite fulcrum or fulcrums and a certain definite lever or leverages used singly or successively to move the structures to their normal position.

The technique of each osteopathic adjustment is exceedingly complex and difficult of proper execution, requiring, as it does, a highly sensitive touch, complete knowledge of the structures and their physiological relations at the seat of the

operation, judgment as to the placing of the fulcrum and the choice of levers, acquaintance with the laws of mechanics governing the use of levers, consideration as to the amount of energy necessary to operate the levers used to bring about adjustment without producing pain or discomfort for the patient. All these and more the osteopathic physician must bring to bear with skill upon each problem of adjustment that he attempts to solve. Every movement that the physician makes during each manipulative procedure is done with a certain definite end in view according to the needs presented by the situation. Nothing is done by rote, the individual case requires definite and specific treatment, whether it be to secure the adjustment of one vertebra or a dozen that may be out of normal position.

The question is often asked how many treatments, corrections or attempts to correct a given lesion, may be necessary before it will remain in normal position, and it is a very difficult question to answer, there being so many factors concerned in the cause and maintenance of these structural perversions. Practically speaking, each case is a law unto itself. A single correction, which being afterwards maintained, has given Osteopathy many a glorious victory over disease. On the other hand, in old curvatures for instance, where there is change in form as well as in position of

the vertebrae, no number of attempts at correction could be crowned with perfect success. Often the ligaments about the lesion have thickened as the result of inflammatory changes, just as they do about any sprained joint, in which case the Osteopath is confronted with a problem that will take time and repeated efforts at correction to successfully solve. Other things being equal, the relief of functional disturbance or the benefit given organic disease is usually in direct proportion to the degree of success obtained in the correction of the lesions, provided, of course, that the organic changes have not progressed beyond all possibility of help from natural sources.

The length of time necessary for a treatment varies according to the needs of the case at hand, and the dispatch with which the physician is able to recognize such need and apply suitable remedial measures. In a case presenting a single twisted rib that is manifestly the sole source of functional disorder, it would be folly to spend time in going through motions about the other ribs. The single rib might be adjusted in a minute or two. On the other hand, it would be equally as unwise to confine the attentions to one rib when several ribs or vertebrae are concerned in the lesion. Here again each case is a law unto itself and the judgment of the practitioner must interpret the law.

There are those who are burdened with the idea

that osteopathic treatment is strenuous, rough and painful, and from certain quarters this idea is encouraged by statements to the effect that only the strong can withstand the treatment. However, the truth is that the treatments are gauged to meet the needs of the patient whether it be a babe, a feeble old person or an athlete. Here is where the Osteopath's judgment is called into play to meet the condition of the patient, as is a medical physician's judgment in the choice of dosage. Even the most skillful operator cannot promise to work always without discomfort or pain to his patient, but if he is conscientious, he will accomplish the end desired with the least possible discomfort to his patient. Points that are extremely sensitive to the touch because of the conditions incident to the lesion or areas of inflammation, are treated indirectly so that the pain of treatment is minimized, but most osteopathic procedures are not necessarily associated with pain.

With regard to the frequency of treatment for the individual case, this too is a law unto itself. In acute conditions several treatments within twenty-four hours may be indicated. Others may require treatment daily, and from that to once weekly or only occasionally, according as the need may be apparent.

Another question frequently asked is concerning the corrections and the permanency of the results

of osteopathic work. Here nature assists the physician with a tendency to maintain normal structural and functional conditions. While the same circumstances that produced the lesions in the first place may operate to produce the same again, yet with the tendency being toward the normal and the patient instructed to avoid possible repetition in the action of the forces that produced the lesion, the results are largely of a permanent nature, the improvement being both specific and constitutional.

It has been truly and wisely said that Dr. Still's one grand discovery as a practical therapist was the fact that one human body, with all its wonderful structure and function, with all its marvelous resources and susceptibilities, could be brought under the control of another individual, who, with intelligent understanding of anatomy and the application of the special technique worked out by Dr. Still, could play upon the mechanism of that body as the skilled performer plays upon the complex musical instrument.

— M. A. LANE, B.Sc.

A DIFFERENTIATION

DIFFERENCES BETWEEN OSTEOPATHY AND MASSAGE

— A. T. Still, M.D., D.O.

[Reprinted by permission from the Ladies' Home Journal]

AN ILLUSTRATION

— Asa Willard, D.O.

[Reprinted by permission from the Journal of Osteopathy]

* * *

The Osteopath's business is to know the plumbing of the house of life.

— A. T. Still

Merely to be able to manipulate no more constitutes an Osteopath than the ability to hold a knife makes a surgeon.

— PERCY H. WOODALL, D.O.

DIFFERENCES BETWEEN OSTEOPATHY AND MASSAGE

By A. T. STILL, M.D., D.O.

OSTEOPATHY absolutely differs from massage. The definition of "Massage" is masso, to knead: shampooing of the body by special manipulations, such as kneading, tapping, stroking, etc. The masseur rubs and kneads the muscles to increase the circulation. The Osteopath never rubs. He takes off any pressure on blood-vessels or nerves by the adjustment of any displacement, whether it be of a bone, cartilage ligament, tendon, muscle, or even of the fascia which enfolds all structures; also by relaxing any contracture of muscle or ligament due to displacements, to drafts causing colds, to overwork or nerve exhaustion. The Osteopath knows the various nerve-centers and how to treat them, in order that the vaso-motor nerves can act upon the blood-vessels, bringing about in a physiological manner a normal heart-action and freeing up the channels to and from the heart. The Osteopath deals always with causes, has no "rules of action," as such, but applies reason to each case according

to the conditions presented, treating no two cases quite alike. He knows from past experience that the effect seen is produced by a cause with which he must deal in order to give relief.

The Osteopath is a physician. The masseur does not take the responsibility of the full charge of a diseased condition, but works under the direction of a physician, and has to do with effects, applying by rote to the body so much rubbing, so much stroking, so much tapping, so much kneading, etc., there being definite rules laid down applicable to general cases.

Osteopathy is a science and an art also. It includes a knowledge of anatomy, biology, physiology, chemistry and pathology. Its therapeutics are independent and original, and as extensive as the entire medical and surgical fields.

AN ILLUSTRATION

By ASA WILLARD, D.O.

A BARBER and a surgeon both work on the body with sharp instruments, yet their work is different. A Homeopath is not an Allopath because they both use drugs. There is a difference between the stone mason and the sculptor. The masseur uses his hands in his work;

so does the Osteopath, and there the comparison ends.

Massage is a system of movements, certain slappings, rubbings and squeezings, done by rote and learned in a few months. An Osteopath is a trained physician seeking out the cause and removing it. The masseur finds a limb congested or badly nourished and goes about rubbing and squeezing to stir up the stagnant circulation. You could do this in the case of the arm which has gone to sleep because it has been hanging over the back of the chair, or the leg because it has been crossed, but only temporary relief would be afforded if the limb is not moved in such a manner that the pressure upon the nerves and blood vessels is removed. The Osteopath would seek out the point where obstruction exists to these nerve and blood currents, remove that obstruction and open the channel. This done, he reasons that the heart will propel the blood, and that the nervous system will attend to its distribution in a normal manner. He stretches muscles when necessary; he relaxes ligaments and adjusts to their normal relations bones, cartilages and other dense structures, but he does not stroke and rub the surface.

The basic principle of Osteopathy is the basic principle that runs through all nature. Adjustment is the basic principle of every science. Osteopathy is a Science. It maintains the same relationship to the great family of science that every other science does. It bears the finger markings of the Omnipotent and Eternal God.

The "Old Doctor" once said to me that life is intelligent wherever you find it; whether in the tree or in the flesh, there is a force that goes to work at once to "fix" the abrasion in the most intelligent way. This force is life. Life is the great healing agent of God's universe. It is in every living cell in the animal and the vegetable kingdoms.

The basic principle of Osteopathy is adjustment.

The mechanics of Osteopathy is adjusting.

The theory of Osteopathy is that, if the adjustment is made, Life, the great healing agent, will repair as far as possible all damages.

—H. J. Everly, D.O

SCIENTIFIC PROOFS OF OSTEOPATHY

. . .

The scientist is only an ignorant man well fed with experience.

— A. T. STILL

Osteopathy stands for the truth wherever it is scientifically proven.

—H. S. BUNTING, A.B., M.D., D.O.

SCIENTIFIC PROOFS OF OSTEOPATHY

By G. V. WEBSTER, D.O.

DR. STILL has been described as, "the original citizen of Missouri to demand visual demonstration." He applied the "Show me" test to the theories of medicine and to his own theories of treatment as well. He was always searching for demonstrable evidence of the scientific value of any theory. That which stood the test was retained as truth; that which failed in the test was rejected.

From the first announcement of the osteopathic theory, there have been those who have poohpoohed the idea of structural perversion being responsible for disease. Their conception of structural derangements was limited to gross dislocations of the joints. They could neither recognize nor conceive that it was possible for minor displacements of the structures of the body to occur. That such should be a controlling factor in disease was to them absurd.

Such evidences as have been gathered by trained observers point unerringly to the support

of the principles of Osteopathy as advanced by Dr. Andrew Taylor Still. These scientific observations include those made in the clinics, in the anatomical and experimental laboratories of the several osteopathic colleges, and the observations and experiments at the A. T. Still Research Institute in Chicago, besides the work of many individuals in private practice.

The evidence gathered in the clinics shows that a group of symptoms in an individual which is recognized as a disease is with great uniformity secondary to certain structural deviations, usually of the ribs or vertebrae, which are anatomically associated with the parts in which the symptom or symptoms are manifest.

Examination and graphic tracings of spinal structural relationships reveal that certain definite alterations of the normal relationships are associated with the disorders in the organs anatomically associated with that portion of the spine where such alterations occur. The readjustment of the structural relationships is followed by relief of the functional disturbances — the symptoms.

In the hundreds of dissections of bodies that have been made in the anatomical laboratories at osteopathic colleges, observations have been made and recorded of existing altered relationships in the framework of the body which, it could be demonstrated, interfered with the blood or nerve

supply of organs that were found to be diseased. The same points have been observed and recorded at autopsies.

The X-ray has repeatedly been able to present on the photographic plate a record of the faulty position of some of the ribs and vertebrae constituting an osteopathic lesion, when the same condition escaped the tactile sense of those not accustomed to spinal palpation. In numerous instances the X-ray has shown such parts in correct relationship after adjustment by osteopathic treatment. The X-ray, then, offers scientific proof of Osteopathy.

Besides the clinical evidences, the spinal tracings, the dissections and the X-ray findings, various animal experiments have been conducted by several competent observers over a period of about ten years. These experiments have all tended to prove the osteopathic theory that spinal strains, curvatures and slight displacements affect the nerves and blood vessels of the organs to which the nerves are distributed.

The spinal lesions experimentally produced in the animals were not accomplished by violence. With the animal relaxed under anesthesia, slight displacements were made by pressure and rotation without greater force than a child might receive in play and immediately forget. After being under observation for varying periods of time, up

to several months, the animals were killed and careful examinations made of the site of lesion, the associated nerves and the organs to which the nerves were distributed. In every series of cases in which experimental evidence was thus sought for the support of the osteopathic theory, the nerves showed congestion and inflammation at the site of the lesion, and the organs they supplied gave evidence of congestion, inflammation and disordered functions. An account of some of the results obtained by animal experiments follows:

DR. McCONNELL'S EXPERIMENTS

Dr. C. P. McConnell has experimented upon healthy dogs, producing slight displacements of the vertebrae and ribs and studying the effects produced. The following is a summary of the results announced in the first twelve cases:

"In nine of the twelve cases, inflammation of the nerves at the seat of the lesion was noticed and in one a nervous degeneration was manifest. In each case the diseased organs observed were under the control of the nerves coming off from that part of the spinal column in which the lesion was made.

Dog 1. — Showed a stricture of the small intestine.

Dogs 2 and 3. — Had spleens very much enlarged.

Dogs 3 and 4. — Became very sick.

Dog 5. — Lost flesh rapidly.

Dog 6. — Dissection showed an inflamed area in the stomach and an enlarged spleen.

Dog 7. — Became blind.

Dog 8. — Became blind.

Dogs 9–10. — Developed goiter.

Dog 11. — Dissection showed hemorrhagic inflammation of the kidneys.

Dog 12. — Died in three days with hemorrhage of the intestines.

Thus the osteopathic lesion theory has been demonstrated: First, by the cure of disease by the removal of lesions; second, by causing disease by producing lesions." — Journal of Osteopathy, May, 1906.

Since the experiments referred to above, Dr. McConnell and his associates have conducted experiments along similar lines on several hundred animals, gaining therefrom further scientific evidences of the effects of bony lesions in the production of disease.

His latest series of experiments have been relative to the influence of the specific spinal lesion as a causative factor in goiter.

The statistics cover about eight hundred cases of goiter in man and the experiments made upon twenty animals. Nine dogs having goiter were treated specifically. All showed reduction in size of the thyroid gland, some of the cases reaching normal. Two cases kept, as controls, under the same hygienic conditions did not show improvement. Nine dogs having normal thyroids were lesioned specifically and six thus lesioned devel-

oped goiter. This proves, both by the cure of goiter in humans and dogs by the correction of lesions and also by the development of goiter in dogs following the experimental production of lesions, the scientific basis for the osteopathic theory that the cause of goiter lies in the faulty mechanical relationships of certain vertebrae associated with the nerve supply to the thyroid gland.

DR. LOUISA BURNS' EXPERIMENTS

Dr. Louisa Burns conducted a series of experiments at the laboratory of the Pacific College of Osteopathy to determine the immediate effects of bony lesions. The experiments were conducted upon animals and human subjects. The animals used for the purpose were cats, dogs, guinea pigs, and white rats. In every case the animal was given an anesthetic and none were ever permitted to regain consciousness after once losing it. No anesthetic was given the human subjects. These were intelligent men and women in good health and ignorant of the nature of the reaction to be expected from the experiment.

The experiments included lesions of the vertebrae, careful note being made of the immediate effects of the lesions experimentally produced. Cases were excluded from consideration where there was any doubt as to the lesion or any of the

observations. One instance of lesion, namely, the ninth and tenth dorsal vertebrae, is here given to illustrate the effects repeatedly observed.

Animal tests showed that lesions of these vertebrae were followed by lessened peristaltic movement of the stomach and intestines; dilatation of the blood vessels of the stomach, intestines and pancreas; increase in the size of the spleen; accumulation of gas in the intestines, and sometimes the peristaltic movement of the intestines was reversed. In some cases, after the lesion had been maintained for some time, bile was found in the stomach.

The human tests showed that lesions of these vertebrae produced a lowering of the blood pressure, increased reaction time, noises of moving gas in the intestine and a sense of sleepiness. The accumulation of gas in the intestines sometimes caused discomfort, but there were no symptoms of nervousness or headache that appeared, although these discomforts were present when the lesions of the vertebrae higher up in the spine were experimentally produced.

The clinic records show that the diseases associated with lesions of these vertebrae are inflammation and dilatation of the stomach, inflammation of the colon, congestion of the spleen, catarrhal jaundice, and constipation.

The tests were carefully conducted and the

recorded observations add scientific proof to the osteopathic theory.

Dr. Louisa Burns is now with the A. T. Still Research Institute. She has conducted several interesting series of investigations concerning the relationship of lesions to various diseases. She thus summarized the scientific proofs of Osteopathy in the Journal of Osteopathy:

"If the work of Dr. Still had included nothing more than the recognition of the relation between maladjustment of bones and other tissues to certain forms of disease, this alone is enough to place him first among discoverers in the field of medicine during the nineteenth century. That these slight misplacements, called "bony lesions," do act as efficient factors in the production of abnormal function is proven by the facts:

1. The examination of patients suffering from disease not due to local injury shows that there are bony lesions affecting the regions most closely associated with the nerve centers controlling the organs which are abnormal.

2. The examination of people in fairly good health may show that there are bony lesions affecting the nerve centers in certain parts of their bodies. In such cases it is found either that they are subject to malfunction of such organs, or it will be found later that these organs are more subject to infection, etc., than the rest of the body.

3. In persons who are sick, and in whom the bony lesion is found, the correction of the lesion is followed by a relief of the symptoms; and if there has been no destruction of the tissue, by return to health.

4. The examination of cadavers frequently shows the existence of bony lesions, and of abnormal visceral conditions associated with the related nerve centers.

5. Slight and temporary bony lesions, experimentally produced upon human subjects, give rise to those changes in the pressure and circulation of the blood which initiate the beginnings of disease and the lowering of vitality.

6. Bony lesions experimentally produced upon animals are followed by circulatory and functional changes of the organs in closest central connection with them, and these changes are to be predicted from the location of the lesions produced. In anesthetised animals, the changes may be watched as they follow the production of the lesion.

The physiological effects of the bony lesions upon the visceral, vascular and skeletal muscles and the glands of the body are explained by the anatomical relationships of these structures."

DR. WHITING'S EXPERIMENTS

Dr. C. A. Whiting conducted a series of experiments on the influence of osteopathic manipulations upon the germ-destroying power of the blood. In a letter he summed up the results of his work as follows:

"Of the little I have done, the most important seems to me to be the demonstration of the increase of phagocytosis (destruction of germs) as the result of mechanical stimulation. I feel quite safe in asserting that phagocytosis is increased to marked degree by physical stimulation. In the early days of opsonic work, our drug friends believed that the only way in which phagocytic powers of the blood could be increased was by the use of some vaccine. I feel quite certain, as the result of a considerable number of experiments, that we get the same result by mechanical stimulation of the liver, spleen, etc. If this belief is true, it is of great value to the physician, for not only does it guide him in his treatment, but it saves him from the necessity of introducing foreign serums into the body."

DR. DEASON'S EXPERIMENTS

Dr. J. Deason at the laboratories of the American School and at the A. T. Still Research Institute has been able to demonstrate in a scientific manner, by a large number of animal experiments, many of the practical workings of the osteopathic idea. Among the results secured with positive evidence by animal experimentation may be mentioned:

That lesion of the spine affects the function of the pancreas, liver and kidneys, and is often a controlling factor in the production of diabetes:

That spinal manipulations with fixation produce marked effects on the functional activity of the internal organs:

That lesions by nervous reflex cause disturbances in distant organs:

That lesions in the mid-dorsal region of the spine influence the secretions of the stomach and intestines:

That abnormal action of the intestines can be caused and ended by manipulation:

That certain manipulative work upon the spine causes certain definite changes in the blood pressure:

That the secretions of the liver and kidneys can be increased by manipulation.

These are some of the practical results of the research work along experimental lines which Dr. Deason has been able to demonstrate scientifically. In the next chapter Dr. Deason gives a summary of the work of the Research Institute.

To review in a word the scientific efforts made to test the claims of Osteopathy, we find that clinic records, spinal tracings, dissections, autopsies, the X-ray, and animal experimentation each contribute their share of demonstrable evidence in support of the theory of Osteopathy that structural abnormalities are a fundamental cause of disease and that the cure of disease is accomplished by the removal of the cause, i.e., by structural adjustment.

There is only one thing to do with natural law and that is to obey. We may violate a man-made law and escape the penalty, but this is not the case with natural law. The penalty for each disobedience must be paid in full. There can be no appeal. The only avenue to liberty and freedom is that of obedience.

Osteopathy is unlike all other methods of cure in that it takes its stand firmly on natural law. Practitioners of this school attempt to cure by cooperating with Nature. Their aim is to "understand the law, to work with it and not against it."

—GEO. W. REID, D.O.

A SUMMARY OF OSTEOPATHIC RESEARCH WORK

SPECIAL ARTICLE BY J. DEASON, M.S., D.O.
Former Director of the A. T. Still Research Institute

* * *

O Lord, grease our heels with the oil of energy that we may slip forward a little. Keep all grease from our toes; we want them dry and sharp so they will hold fast to every inch of progress our greasy heels have gained for us.

— A. T. STILL

An Osteopath should never speak until he knows he has found and can demonstrate the truth he claims to know.

— A. T. Still

A SUMMARY OF OSTEOPATHIC RESEARCH WORK

By J. DEASON, M.S., D.O.

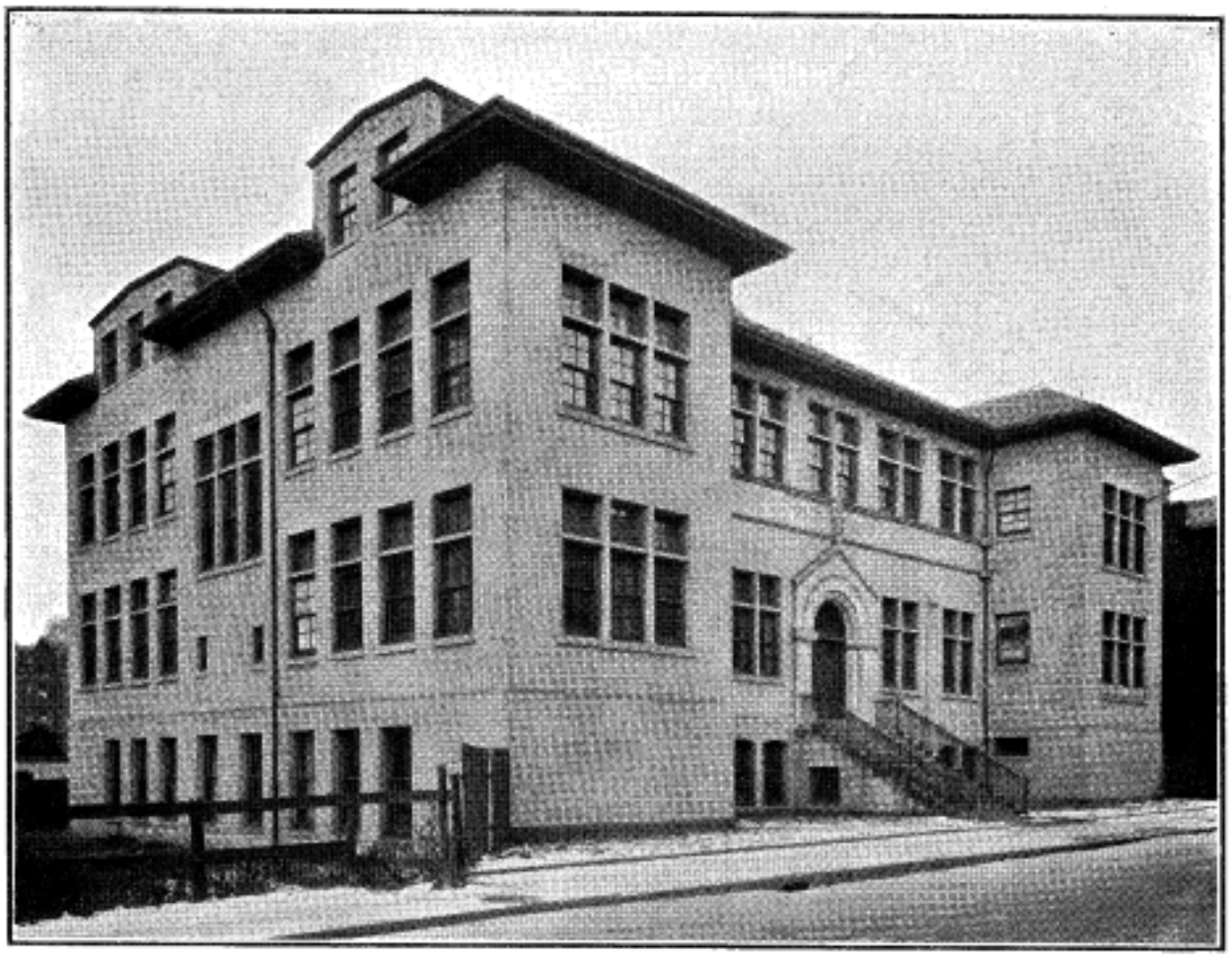
DURING the past five years while teaching in the American School of Osteopathy and since coming to the A. T. Still Research Institute, by the aid of a number of assistants, we have been studying the principles of Osteopathy experimentally, and have, we think, determined some things of real value.

In much of our work we have used animals,—monkeys, dogs, cats, rabbits and guinea pigs,—for the purpose of studying the results of osteopathic lesions. The animals are first normalized by keeping them under perfectly normal conditions for a number of weeks or months, and are observed very carefully. They are then lesioned by placing them under complete ether anesthesia and producing a subluxation in the spine. After this they are again carefully observed for a number of weeks or months and the results recorded. Only those animals are used for such work which are found to be entirely normal in every respect. After the animal has developed some disease or

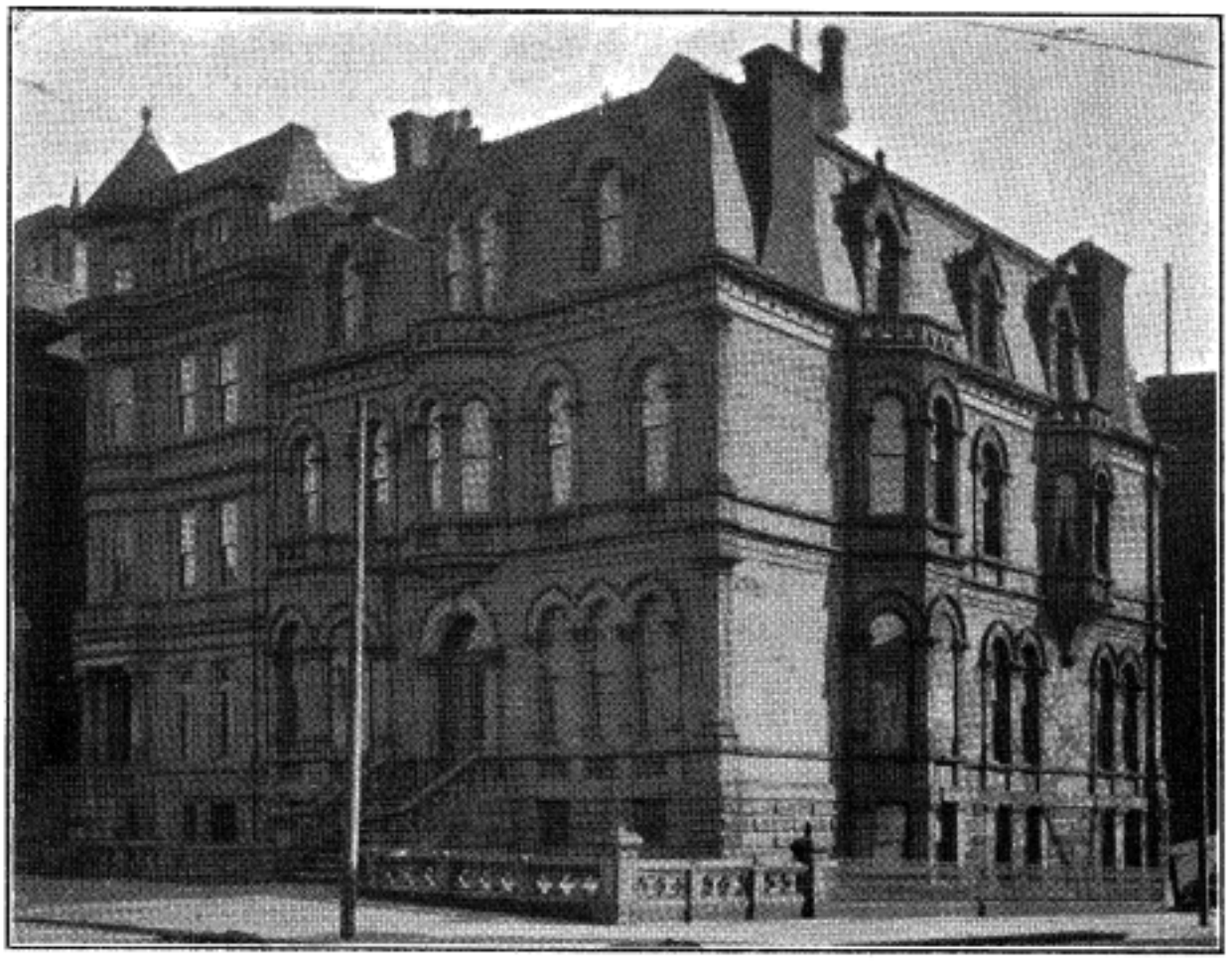
perverted physiological condition from the results of the lesion produced, it is killed by means of ether or chloroform and a careful study, both macroscopic and microscopic, is made of the various bodily tissues.

By this method of study we have found that nearly every organ of the body can be influenced by the effects of bony lesions (subluxations) in different parts of the spine. Such resulting conditions as abnormal physiological action and pathological changes of the stomach, liver, intestines, kidneys, spleen, pancreas, adrenals, etc., have been positively demonstrated many times. A detailed account of this work would require too much space and would be uninteresting to anyone other than the physician or experimental scientist. The results of this work on about one thousand animals confirms the findings of Drs. Burns, McConnell, Whiting and others who have done similar work.

The experimental work on dogs shows that the kidneys and liver can be affected mechanically. By osteopathic manipulation of the spine, it was shown that production of urine by the kidneys could be greatly increased. In some cases the increase amounted to more than one hundred percent. Since the kidneys are the filters of the blood it may be seen that the elimination of toxic substances from the blood may be accomplished



Massachusetts College of Osteopathy, Boston



Philadelphia College and Infirmary of Osteopathy,
Philadelphia, Pa.

by osteopathic methods. This has been put to practical test by many osteopathic physicians since the results of the experimental work were published and has proven to be of actual practical value.

Similarly it was shown that the functional activities of the liver could be controlled. By measuring the amount of bile (counting the drops and by weighing) secreted in a definite time and then manipulating the segments of the spine from which segment of the spinal cord the nerves originate, which supply the liver, it was found that not only the amount was increased, but that it was higher in specific gravity. Thus we have definite evidence of the value of osteopathic therapy on the functions of the liver.

When any animals chosen for this work failed to normalize, i.e., if they were not found to be in perfect health in every way, they were not used but were treated osteopathically, and in most cases we were able to normalize such animals after this treatment. Our work on filariasis in monkeys is an interesting example of this. Fourteen months ago we received two dozen monkeys which had recently been imported from the tropics. All but one were found to be affected with filariasis, a disease somewhat similar to sleeping-sickness, caused by an animal parasite. Two animals died before the cause was discovered.

The affected monkeys were then divided into two groups. Seven were treated by the best known medical methods and fourteen were treated osteopathically. Of the seven treated by medical methods all died. Of the fourteen treated osteopathically, ten recovered. We kept a few of these to determine whether the recovery was temporary or permanent. As yet none have shown any further signs of the disease but have grown much larger and stronger which shows that the cures are both complete and permanent.

It will be seen that our work differs from the work of most research workers in that we are studying the natural methods by means of which parasitic and bacterial disease can be cured rather than the methods of producing disease in animals and then treating the results by vaccines, serums, etc.

Another part of our work consists of making a more thorough and careful study of human anatomy by dissections. It has been our purpose to dissect in such a way as to determine how we can best reach certain organs by manipulation and therefore correct abnormalities. This work has also resulted in gaining some valuable information. As an example of this we may cite the new method of treating catarrhal deafness. It was found that the pharyngeal opening of the eustachian tube (the tube which leads from the middle

ear to the pharynx) was frequently closed by catarrhal inflammation of the nose and throat and that deafness and ringing in the ears might be a result. It was Dr. J. D. Edwards, then a student in my classes, who put this information to practical test and it was he who did most to bring it before our profession. During the past two or three years we have been working together on this problem and now many of our physicians are successfully applying this technique in practice. While we have not as yet studied our cases sufficiently to know the exact percentage of cures, I believe that it is safe to say that we get favorable results in at least seventy percent of cases of catarrhal deafness.

Another part of our work has been the study by means of bacteriological methods of vaccines and serums and their effects. We want it to be definitely understood that Osteopathy as a profession or as a school of practice takes no stand for or against vaccination or serum therapy or any method of treating disease the value of which has been demonstrated. Our physicians, however, have not been taken by the serum craze as has the medical profession, and this is because we are not without a reasonable and natural method of therapy.

The results of our study of smallpox vaccine showed that there was no such material on the

market which did not contain various living bacteria which were dangerous. From specimens of such virus prepared by two of the best known manufacturers in America we isolated more than thirty different kinds of bacteria, eighteen of which were pathogenic or disease-producing bacteria. For the results of this work in detail we cite the reader to the Journal of Osteopathy for March, April, May and June 1911.

Some of our most recent work has consisted of the examination and testing of various nose and throat washes commonly sold on the market. Of fifteen such preparations we have not found one that will kill the bacteria in the sputum when mixed with it for as long as an hour, nor do they seem to have any marked beneficial effect on the mucous membranes. The above is only a brief summary of some of our work. The detailed reports may be found in the Journal of the American Osteopathic Association and other journals.

I am greatly indebted to my co-workers in the A. T. Still Research Institute and others for assistance in this work, for without their valuable suggestions and assistance it would never have been accomplished.

THE OSTEOPATHIC EDUCATION

OSTEOPATHY A DISTINCT SCHOOL

— C. P. McConnell, D.O.

[Reprinted by permission from the Journal of the American Osteopathic Association]

OSTEOPATHIC TEACHING

— C. C. Teall, D.O.

[Reprinted from the Bulletin of the Atlas Club]

THE OSTEOPATHIC CURRICULUM

— R. H. Williams, D.O.

[Reprinted by permission from the Osteopathic Magazine]

* * *

Knowledge is the result of the training of our mental faculties in the school of Nature. Knowledge is Nature understood. He who knows the most of Nature is the wisest man.

— A. T. Still

After all has been said, after all theories have been spun, no matter by what school, the very kernel of the healing art is simply what can you or I do to assist Nature.

— C. P. McConnell, D.O.

OSTEOPATHY, A DISTINCT SCHOOL

By CARL P. McCONNELL, D.O.

OSTEOPATHY is great because its merits are inclusive of a broad field. Osteopathy is a system of healing, not alone a method of treatment. It is a system or school because it has a distinctive and embracing etiology, diagnosis, pathology, and therapy. Other schools are divergent on the therapeutic plane only. Therapeutics can amount to but little if it is not based upon the other factors, and those factors consist of etiology, diagnosis, and pathology. Thus the reason of an unstable and shifting therapy of the drug schools, What will make a school of the healing art stable, consistent, and hence scientific is its etiology and therapy. The latter, at best, is only a means to an end. Osteopathy presents, logically and practically, this necessary fundamental based upon the bedrocks of anatomy and physiology.

OSTEOPATHIC TEACHING

By C. C. TEALL, D.O.

OSTEOPATHIC teaching is revolutionary. Old and accepted ideas were broken away from and an entirely new field of investigation was opened.

In the beginning, a condition was found in the patient: it was corrected and the result was health. That was all the public asked. One ounce of cure was worth tons of theory and they did not inquire into the means of their relief. But adequately to teach Osteopathy a vast amount of original work had to be done. Anatomy is anatomy but there is a vast difference in its application. Physiology must be taught to mean something more than an interesting phenomenon. Pathology had an unfilled gap between cause and effect which must be bridged. The post-mortem had a great story to tell but an Osteopath must tell it. A slide of degenerated tissue under the microscope is of interest, but why the degeneration? It is described at length by the authorities but the causes and morbific changes are not carried out. Obstetrics along strictly natural and physiological lines insuring

both mother and babe against injury; gynecology minus the knife and plus common sense; all these and more had to be shaped to teach the osteopathic student. The archives of Osteopathy were empty a few years ago. There was no precedent to follow and the ideas in teaching which had prevailed for centuries dominated. All this is changed. The colleges teach the science along strictly osteopathic lines, making the application of the truths which have escaped the notice of centuries of investigation.

There is a much discussed subject, just what is osteopathic and what is not. Dr. C. M. T. Hulett, at a Greater New York Osteopathic Society meeting said:

"Every application, appliance, method or procedure used in treatment of disease may be classified under two heads. If its effect is to modify the vital processes themselves, it is medical. If its effect is to remove conditions which are interfering with processes, it is osteopathic. Among the first are most drugs used for their physiological effect, much surgery, electricity, hot air, vibrators and similar devices. Among the second are manipulation, germicides, regulation of diet, habits and life environments. If the X-ray or Finsen light will kill the lupus or cancer germ the principle of their action is osteopathic."

That is the best opinion on that much-mooted question I have ever seen and it is a guide-board for all who are in doubt.

THE OSTEOPATHIC CURRICULUM

By RALPH H. WILLIAMS, D.O.

THE difference in the training of an osteopathic physician and a doctor of medicine is one of quality, not of quantity.

To the lay mind the perusal of the curriculum of an osteopathic and a medical college would indicate a difference in but one subject, that of therapeutics. Naturally in the training of a doctor of medicine this covers drugs and their use in practice, while the osteopathic physician is trained in the application of the osteopathic theories to the treatment of disease.

The difference is greater than appears on the surface. In the osteopathic college every subject is taught with the osteopathic or mechanical principle of the causation of disease co-ordinated with the instruction in anatomy, physiology, pathology, etc. The incorporation of osteopathic principles begins with the first lesson in anatomy and ends with the last clinical demonstration.

The length of the osteopathic course is the same as the medical course: four years of approximately eight months each.

The New York State Board of Regents require that an institution recognized by them shall maintain a four-years' course contemplating not less than thirty-four hundred hours.

The American Osteopathic Association requires a course of four years with a minimum of four thousand hours. Some of the osteopathic colleges have a curriculum calling for over fifty-five hundred hours, and compare with the highest grade medical colleges.

The American Medical Association requires a minimum of four thousand hours' work in a period of four years for all Class A medical schools.

The minimum requirements of the American Osteopathic Association exceed the requirements of the New York State Board of Regents and are the same as those of the American Medical Association.

One of the osteopathic colleges registered by the New York State Board of Regents maintains a four-years' course with a curriculum of five thousand four hundred sixty hours; over twenty-one hundred hours more than required by the Regents and fifteen hundred more than required by the American Medical Association.

In order that a definite idea as to the requirements of an osteopathic education may be had, we append hereto a copy of the standard curriculum required by the American Osteopathic Asso-

ciation of all osteopathic colleges which are affiliated therewith.

CURRICULUM REQUIRED BY THE AMERICAN OSTEOPATHIC ASSOCIATION

Subject	Hours
Anatomy	550
Physiology	324
Chemistry	220
Biology	72
Physiologic Physics	54
Histology	128
Bacteriology	90
Osteopathic Technic and Tactile Training	198
General Pathology	108
Osteopathic or Special Pathology	54
Embryology	36
Post Mortem and Medical Jurisprudence	26
Gynecology	126
Obstetrics (including three deliveries)	180
Diagnosis (including General Physical Diagnosis, Osteopathic and Laboratory Diagnosis)	220
Surgery (including Orthopedics)	320
Dietetics, Hygiene and Sanitation	108
Toxicology, Effects of Drugs and Urinalysis	72
Practice of Osteopathy (covering Nervous and Mental Diseases; Alimentary and Urinary Tract; Infections and Constitutional; Circulatory and Respiratory; Skin and Venereal; Eye, Ear, Nose and Throat and Pediatrics)	520
Non-Medicinal Therapeutics and Emergencies	18
Amphitheater Clinics	252
Clinical Treatments	324
	4000

Under the head of Osteopathic Technic an Tactile Training will be found the requiremen

of one hundred ninety-eight hours. Unlike the training of the doctor of medicine the training of the osteopathic physician cannot be wholly theoretical. He must have the training in his hands as well as in his brain. He must learn to recognize by the sense of touch the slight abnormalities which would escape the untrained practitioner. It is for this reason that the medical practitioner is unable to recognize and appreciate the importance of abnormalities which can be discovered by the trained osteopathic fingers, abnormalities which are the keys to the success of osteopathic practice. The medical practitioner is endowed with the same sense of touch that the osteopathic physician possesses, but just as the ordinary individual is unable to read the books of the blind through the lack of special training, so is the medical doctor unable to recognize and understand the meaning of the slightly altered conditions which mean so much to the osteopathic physician in the making of his diagnosis and his treatment of diseased conditions.

With the growth of the osteopathic profession there has grown up an appreciation of pathology from a different viewpoint as to cause and effect; an understanding of pathology supported by experiments demonstrating their correctness, a phase of pathology that is little understood, taught

or appreciated in the existing works on the subject from a medical point of view. This growing subject is provided for in the osteopathic curriculum. Only recently one medical author has approached the osteopathic concept in pathology.

The Principles of Osteopathy are the counterpart in the osteopathic course of the study of pharmacology and materia medica of the medical course, and that which makes the training of the Osteopath distinctive as compared with the training of a medical doctor.

The osteopathic student studies the human body in health as well as in disease, together with the body's own power of combating disease. The medical student spends much of his time studying the influences outside of the body which cause disease overlooking the structural conditions within the body which make the effect of the outside influences possible.

The medical student completes his education and receives his diploma with little or no practical experience. The osteopathic practitioner, on the contrary, spends a considerable portion of his time during the last two year's work in the actual care of patients. While this is, of course, under the observation of trained clinicians, the student does the actual work, and is responsible for the results accomplished. He has, not theory alone, but practical knowledge, drawn from the most effi-

cient of all teachers, "Experience," to guide his work.

In addition to a large out-patient clinic which is available in each of the colleges for the practical instruction of the student, each has a well equipped hospital for the care of all kinds of acute and surgical cases, insuring to the student body a wide range of experience in the recognition and actual treatment of acute, infectious, contagious and surgical diseases.

No modern theory of the causation of disease is left out of his training, whether this theory be in the theoretical stage or has become a demonstrated fact. He is trained to recognize all forms of bacteria and is taught their relationship to diseased conditions. Every known and accepted method of diagnosis in use by the medical profession is taught to him in addition to his own methods of osteopathic diagnosis which is peculiar to and distinctively characteristic of the school he represents.

In his fundamental training and knowledge of the human body the osteopathic physician stands second to none.

Osteopathy is a comparatively new system of practice, having existed for only about twenty-five years, and yet much valuable research work has been done along new lines. I believe that no other school of practice, in proportion to the length of time it has existed, has done as much original and scientific investigation pertaining to the theories and methods of its treatment. I am sure that no other school has been more successful in confirming its theories by research.

J. DEASON, M.S., D.O.

APPLICATION OF OSTEOPATHIC PRINCIPLES

* * *

Osteopathy's own philosophy of surgery, midwifery and general treatment is complete and defies refutation.

— A. T. STILL

A point that appeals strongly and is particularly gratifying to the osteopathic practitioner, is that not a certain line of diseases only is treated more successfully by osteopathic work than other diseases, but that the entire field of medicine is covered by osteopathic therapeutics.

— C. P. McConnell, D.O.

APPLICATION OF OSTEOPATHIC PRINCIPLES

By G. V. WEBSTER, D.O.

THE application of the principles of Osteopathy to the field of therapeutics has demonstrated that they are eminently practical. If the Osteopath could not accomplish in a better way things that have been attempted, or could not do things which would otherwise be impossible, there would be no excuse for his existence. In the charter of the first osteopathic school, the purpose of the school is set forth as being to "improve our present system of surgery, obstetrics and the treatment of diseases generally and to place the same on a more rational and scientific basis." That this purpose has been fulfilled, the practical workings of Osteopathy bear the evidence.

The application of osteopathic principles to meet the problems of bodily disorder has demonstrated their efficiency in practically all diseases. The individual Osteopaths may vary in proficiency, but the principles remain true. Results

depend upon the degree with which the practice is made to approach the principle, Osteopathy being both an art and a science.

An understanding of the field in which osteopathic principles are applicable may possibly best be gained by a review of some of the basic osteopathic considerations in several of the general classes of disease.

DISEASES OF THE NERVOUS SYSTEM

A nerve cell with its attendant fiber may be likened to an electrical battery with its attached wires which convey the power of the battery to a point of usefulness. Electricity may be interpreted in terms of light, heat or motion — all different forms of energy. Nervous impulses in the body are interpreted in terms of motion, secretion, sensation, nutrition, consciousness, and by the special senses.

In the case of electricity, the integrity of the battery, the wires and the end instrument, which evidences the impulses as light, heat or motion, must be maintained. The battery cell may be impaired, the wire broken or short-circuited, or the instrument may lack adjustment; in any case a failure of function results. With the battery, the cause of failure may be mechanical or chemical. The same is true of the nerve unit.

A mechanical interference, as by pressure, with the nerve cell, fiber or end organ, a chemical or vital change through degeneration of the nerve unit from exhaustion or impaired nutrition, may take place. Abnormal pressure is the primary cause of impaired function in either case. In the first, the pressure is exerted, by some structure out of its position, upon the nerve cell or fiber; in the second, the pressure is upon the vessels carrying nutrition to the nerve unit.

The Osteopath is the electrical engineer of the nervous system. It is his aim to preserve the integrity of the individual nerve, cell, fiber and end organ by relieving them of any abnormal pressure, or interference with their supply of nutrition.

Of the disorders incident to nerve tissue, we may have, as has been suggested, those that are either functional or organic; each with possible resultant disturbances of motion, secretion, sensation, nutrition, consciousness or of the special senses. A great number of these cases of both classes have come under osteopathic observation and the osteopathic search for the causes of such diseases with the application of the principle of correction of structural abnormalities has resulted in lessening a large amount of human suffering.

DISEASES OF THE DIGESTIVE SYSTEM

Of the cases which have presented themselves for osteopathic examination, a large number have been disturbances of the digestive system. Of these a portion have resulted from some abuse of the organs of digestion by dietetic errors, in which case correction of the errors of diet would be indicated, but most of the cases present some structural derangement which is manifestly interfering with the functioning of the stomach, liver, pancreas, or intestines.

The stomach receives an extensive nerve supply, partly from the pneumogastric nerve which leaves the cranium and passes downward to be distributed to the organs in the thorax and abdomen, and partly from the nerves that leave the spinal cord and chain of sympathetic nervous ganglia along the spine. These nerves carry impulses that control the movement of the muscular wall of the stomach, the action of the various glands that secrete the gastric juice, the quantity of blood that is distributed to the organ and the nutrition of the organ itself, as well as sensation to the nerve centers in the cord and brain.

If motion, secretion, nutrition or sensation be impaired in the organ, the organ is not to be blamed. One could scarcely, with justice, blame the telephone if the wires were down. Somewhere

there is a mechanical defect — an interference with the origin or transmission of the nervous impulses which govern these functions. A careful osteopathic search will reveal the point of interference. A careful physical examination, with possibly a laboratory examination of the stomach contents if necessary, will give the evidence as to the functions impaired or of any organic trouble that may have resulted from long continued functional disturbances. A little engineering skill is needed to remove the interference and if successfully accomplished the organ will go about its work without further hesitancy, provided that these interferences have not been operating so long as to have produced organic changes. Even then nothing could be of greater value to the suffering organ than to have its struggle for existence extended a helping hand by way of improved blood and nerve supply.

One could supply from an outside source some of the deficient constituents of the gastric juice, one could knead the stomach and supply in a measure impaired motion, one could use an anodyne and relieve distressing sensations, but it would seem the more logical course to so put in order the bodily mechanism that the constituents of the gastric juice would be naturally supplied in proper proportion, the contents of the stomach be churned by its own power, and then

with perfect digestion there would be no occasion for annoying sensory disturbances to reach the consciousness.

The functions of the other organs of digestion, the liver, the pancreas, the intestines, the colon, may likewise be impaired, and a long list of names has been applied to the various symptoms and conditions. In these as with the stomach, faulty diet, micro-organisms, etc., may play a part, but analyzed carefully it will be found that primarily the cause rests in some structural abnormality operating to derange the blood or nerve supply of the organ or part. In diseases of these organs it would likewise be the logical thing to find and remove such an obstruction, whether the case be congestion of the liver, intestinal indigestion, appendicitis, colitis, constipation, dysentery, or any one of the list of diseases of the digestive tract, where the organic changes have not reached the stage of degeneration that might require operative interference.

DISEASES OF THE RESPIRATORY SYSTEM

Under this heading may be included all disorders of the nose, larynx, bronchial tubes, lungs and pleura whether or not accompanied by specific infection. Nearly all of these, it has been shown, are primarily due to interrupted nervous impulses.

S. DETWILER, D. O.
444 WATERLOO ST.
LONDON, CANADA

Since the nerves hold under their control the caliber of the blood vessels and so determine the quantity of blood distributed to a part, it is obvious that an interference with the vaso-motor nerves, as they are called, would result in either too little or too much blood being driven to an organ. Too much blood and we have a congestion; too little and the nourishment of the tissue is impaired — in either case the vitality of the part is lowered. Germs, whether they be the germs of la grippe, pneumonia or tuberculosis, find a convenient lodging place in tissue with lowered vitality — otherwise they might be destroyed, before they had time to multiply and colonize, by the white blood corpuscles which act as little policemen throughout the body, arresting and devouring invading germs. Perfect circulation through a part would mean that these policemen were "covering their beat" with due regularity and in sufficient numbers to repel any ordinary invasion.

Osteopathic work by correcting any mechanical interference with the vaso-motor nerves to the lungs is of value in maintaining the normal healthy tone of the lung tissue by preventing congestion or faulty nutrition. It aids in helping the lung to resist the invasions of germs and in strengthening and restoring to health weakened tissues.

All diseases of the respiratory tract are not

associated, however, with germs, but in all, structural conditions play a large part, and the axiom that normal structure is a prerequisite of normal functioning holds true in disorders of the respiratory tract, whether the symptoms of such structural disorder be grouped under the name of asthma, hay fever, catarrh, croup, bronchitis or one of the acute infectious diseases. The essential point is to find the primary cause of the disease — that which is interfering with the normal physiological action of the organ or part — and to set about to correct the same, with the assurance that God made man a perfect being and if there is failure in any function there must be a cause for such failure.

DISEASES OF THE CIRCULATORY SYSTEM

The blood is the chief agent of transportation in the body, carrying food to and waste from the tissues. The organs necessary to maintain this transportation system comprise a propelling force, the heart; avenues of distribution, the arteries and capillaries; also channels for the re-collection and return of the blood to the heart, the veins.

Many of the diseases of the body may be found associated with some alteration or defect in this transportation system. "The reign of the artery is supreme," is the way the "Old Doctor" ex-

pressed it. In the consideration of the diseases of the organs of the circulatory system, we find disorders of two kinds — functional or organic.

The heart receives nervous impulses by way of the pneumogastric nerve which tend to retard its action and from the cardiac sympathetic nerves which accelerate its action. It also has nervous ganglia within its muscular walls which are automatic in action. Variations in the rate or regularity of the heart's action indicate some abnormal nervous impulse received either over the pneumogastric or sympathetic nerves. These abnormal impulses may be purely reflex, as from exophthalmic goiter, anemia, acute infectious disease, dyspepsia, overwork, stimulants, poisons, pelvic disturbances, emotional states, etc. However, a satisfactory explanation for all functional disturbances cannot be found in the reflexes. The pneumogastric and sympathetic nerves at certain points in their course pass in very close relation to some parts of the bony framework and if these structures are occupying other than their true anatomical positions they may be the source of direct interruption to the nervous impulses that should reach the heart. Osteopathic clinical evidence and the evidence obtained by animal experiment go to show that most functional disorders of the heart have as a causative factor some displacement, however slight, of the ribs or verte-

brae in relation with these nerves. The indication, then, in case of functional disorder of the heart, is to search for a possible reflex cause and remedy that or to locate a possible direct cause in some structural abnormality of rib or vertebrae and correct that.

Lesions producing cardiac neuroses may lead to organic disease although many other indirect causes are recognized. In organic troubles the problem presented is much more difficult and serious. While it would not be expected that the organic disease could be remedied, yet the work of freeing the nervous impulses that should reach the heart is of the utmost value, materially assisting the organ in performing its duty even though it is handicapped by organic changes.

Functional disease of the blood vessels may result from disturbance to the vaso-motor nerves — the nerves to the muscular coat of the arteries that Osteopaths are so much interested in and which have their origin along the spine. Organic diseases of the blood vessels are of the nature of degenerations of varying kinds and degree.

In all cardiac or circulatory disturbances the work of the Osteopath is quick, safe and efficient, no other method of treatment operating so in harmony with Nature's laws.

DISEASES OF THE KIDNEY

A great deal of mystery has existed in the popular mind as to kidney difficulties and, to one unacquainted with the facts, it might seem that the application of the osteopathic principles for the relief of such disorders is but another addition to the mystery.

The function of the kidney is that of elimination — to filter out and excrete the excess water and waste products from the blood stream. This function is dependent upon the integrity of the epithelial cells that line the little tubules of which the kidney is largely composed. These in turn depend for their health upon normal nutrition and for their action upon normal nerve impulses. The nerves that supply the kidney, controlling the distribution of blood to it and the excretory function of the organ, can be traced back through the solar plexus to the center in the spine where any abnormal structural pressure will interfere with their harmonious action.

The evidence regarding disease of the kidneys is obtained largely by urinalysis supplemented by a thorough physical examination and a careful osteopathic search for derangements of the ribs or vertebrae near which pass the nerve fibers just mentioned. When evidence is obtained of faulty action of the kidney, the next important

step is the discovery of a cause. Inasmuch as a nerve is with difficulty impinged while passing through soft tissue, it is but reasonable to suspect that the interference is at a point where it comes into more or less intimate relation with denser structures — bones or ligaments. The point of interruption to the nervous impulses having been discovered in the faulty relations of some of the ribs or vertebrae, the Osteopath sets about correcting the same, reasoning that if structural relations are maintained, as Nature intended they should be, in all parts of the anatomy associated with the kidney, the organ will function properly, provided that the degenerative changes in the tissues of the kidney have not progressed beyond repair. Even in infections of the kidney the infectious process may be arrested by elimination of the source of infection and the restoration of normal blood and nerve supply to the organ.

DISEASES OF THE PELVIC ORGANS

In the treatment of the diseases incident to the pelvic structures, Osteopathy gave the world an entirely new, and we believe correct, conception of the cause and cure of such conditions, proving a great boon to suffering woman-kind. Long had attempts been made to remedy the conditions found, but not one word in all medical literature pointed toward the bony lesion as a fundamental

cause of such conditions. It is with truth that Mrs. J. B. Foraker of Ohio said: "If Dr. A. T. Still had discovered nothing new in medical science but what he has done for woman, his name would go down the ages as the greatest physician of any age and one of the historical benefactors of the race."

The pelvic organs are delicately balanced, supported by ligaments. Clothing, posture, habits, occupation, etc., all influence more or less the integrity of the supports and the balance of the pelvic structures, but with the ligaments maintaining their normal tone and proper tension organic displacements would not occur. The nerves which give tone to the ligaments and the vaso-motor nerves controlling the blood supply to the pelvic organs have their origin along the spine. Any structural derangement there would so interfere with the nerves that the ligaments would lose their tone, permitting relaxation, and allowing gravity, or other forces, to carry the organs to abnormal positions. The deranged vaso-motor nerves, together with the faulty position, would produce congestion which in turn might lead to faulty functioning, abnormal secretion, degeneration of tissues or tumefaction. To treat these conditions without correcting the primary structural cause is but to treat the symptoms. Permanent relief could scarcely be hoped for without the

removal of the cause. The Osteopath deals largely with causes, yet being mindful of the symptoms and conditions that those causes have produced.

There is probably no field so frequently invaded by the surgeon's knife as the pelvis, yet taken in time the majority of these cases could have been saved the operation and the suffering that preceded it, being restored to health and comfort without the knife. It is with causes that we must be concerned if we would find how the conditions that would eventually demand an operation may be remedied, and it is in dealing with causes that Osteopathy has won its great success in this as in other fields of therapeutics and prophylaxis. Speaking in this connection Dr. Lena Creswell says:

"Almost all of the diseases of the pelvic structure are curable in the beginning without the surgeon, and in truth, the osteopathic practice is revolutionizing modern surgery, but even yet the number of women operated on for pelvic trouble is alarming. Many are unsexed and it would seem that many of these necessary operations might be prevented if the women of our land possessed the proper knowledge of the care of their bodies. Many cases, which were formerly considered surgical, respond readily to this treatment but some cases, usually dating from parturition, must have an operation. I have found osteopathic treatment many times of great value to prepare the patient

for the operation and it frequently is necessary afterwards."

"The science of Osteopathy does more than all others to revolutionize the treatment of the diseases of women and has advanced further along this line than any other method. Osteopathic gynecology is based on facts. Our method is to locate the lesion that interferes with the blood and nerve supply and if possible to remove the same. We should feel proud of the record we have made in the treatment of these diseases. From year to year we are demonstrating a more complete method of treating the diseases of womankind."

DISEASES OF THE SKIN

Affections of the skin are a class of diseases that at first thought might seem beyond the reach of osteopathic measures. The skin exercises protective, absorptive and excretory functions. Overburdening any one of these functions may result in disease. The protective function may be overburdened, as by germs or parasites; the absorptive, as by chemicals; and the excretory, as by the defective action of one of the other organs of elimination.

Such disorders may be divided into two general classes with reference to causes, external or internal. Both may be combined. Of the external causes, probably germs are frequently a direct cause. To remove the cause, remove the germs,

which may be accomplished by the application of a germicide. This alone is required; the reconstructive forces of the body restoring the surface to normal as soon as the cause is removed. Of the internal causes, those traceable to some disorder of nutrition, metabolism or elimination predominate. In the search for the causes, we are often led step by step back to some structural abnormality interfering with one or more of the organs concerned with the constructive or eliminative forces of the body. In connection with this class, purely osteopathic work is of distinct therapeutic value, as has been shown by the cases of eczema, for instance, which have yielded to osteopathic work applied to the correction of the nerve and blood supply to the liver and pancreas after various other means for relief had been unsuccessfully tried.

ACUTE INFECTIOUS DISEASES

The invasion of the human body by pathogenic micro-organisms gives rise to what are known as the acute infectious diseases, such as typhoid fever, scarlet fever, measles, influenza, etc. The battle is waged between the invading germs and the powers of resistance inherent in the body. On the one hand, the germs seek to destroy the harmony of the bodily functions by the production of poisons that spell death to the tissues; on the

other hand, the body manufactures an "anti" poison which neutralizes the poison produced by the germ and permits the white blood corpuscles to destroy the invaders or, at least, restrict their operations. The question is, Which shall prevail? Once started, it is might that prevails.

The physician should ally himself with the forces of resistance and his problem is how best to assist the body in its efforts to overcome the germs and the effects of their poisons. The forces of the body are capable of making the necessary resistance provided that there is no obstruction to their perfect operation. "No obstruction" means unimpeded circulation in all parts and no interference with the nerve supply to the organs whose function is the manufacture of "anti" poisons, or to the organs of elimination. The effort has been made to produce some of these "anti" substances in the bodies of animals and then appropriate in the form of serums the "antis" thus obtained for use in the defense of the human organism. These are not of the nature of a drug but rather of the nature of an antidote for poison — the poison produced by the germ — and as such their use is not at direct variance with osteopathic theories, although it has been repeatedly demonstrated that the body in perfect health will provide from its own laboratories sufficient of the "anti" substances to neutralize the toxins produced by

the germs, making the use of such borrowed "anti" substances superfluous. An instance of this is frequently found where a person may not be infected although repeatedly exposed to the germs of measles, scarlet fever, tuberculosis, etc. The reason that these cases of immunity are not more numerous is because so few people are in absolutely perfect health.

Any means that will assist the organs of defense is of value. The Osteopath by opening every channel of operation for the fighting forces of the body materially assists in the checking or repulsion of the invading germs, in the production of germicidal properties in the blood and in the elimination of the poisons from the system. Any other poison or drug entering the system at the time of the invasion but increases the burden of poisons to be neutralized or eliminated.

A striking axample of the efficiency of Osteopathy in the acute infections was shown by the osteopathic record in the great influenza epidemic of 1918, in which the death rate under osteopathic care was less than one half of one percent.

DISEASES OF THE EYE AND EAR

The eye and ear are organs of special sense. The eye is formed to receive waves of light and convey the impressions received to the mind. The ear is formed to receive waves of sound and

convey and interpret them to the consciousness. Both organs are located in the cranium and nearly surrounded by firm bony walls. How then can osteopathic work be of value to disordered organs so deeply situated in bony cavities? With the delicate mechanism of the eye or ear, the Osteopath does very little directly, yet in the treatment of diseases of these organs Osteopathy has achieved some of its most remarkable results.

Tracing the sympathetic nerve fibers of the eye backward toward their origin, the anatomist and physiologist have found that some of these nerve fibers, having their nucleus of origin near the base of the brain, pass downward through the spinal cord to the level of the upper dorsal spine, i. e., between the shoulders, where they leave the cord and, passing out between the vertebrae, join the chain of sympathetic nervous ganglia that are situated just in front of the vertebrae and lead upward through these ganglia and their connections and are finally distributed to the eye. This is a very roundabout way for the nervous impulses to travel in reaching the eye yet such is the course they follow. The eye has other nerves more direct in action controlling its motion and some of the other functions, but those just mentioned being the sympathetic, control the involuntary muscles within the eye itself, the caliber of the blood vessels to the eye and so the

nutrition to each individual cell that goes to make up the delicate organ. Any irritation or interference with these sympathetic nerves would result in disturbances that might produce disease and impair the vision. It is not claimed that all eye disorders are amenable to osteopathic treatment, yet the application of the osteopathic principle of correcting all structural deviations, such as slightly misplaced vertebrae in the neck, has resulted in so freeing the interrupted nervous impulses that frequently all the resultant symptoms manifest in the eye were relieved.

It could scarcely be expected that in this brief article mention could be made of all the symptoms and diseases of the eye that have been benefited or cured by osteopathic corrective measures applied to the structures in relation with the sympathetic nerves to the eye, for well authenticated case reports of the eye benefits are numerous in osteopathic literature. It is sufficient to state that the practice of finding what is wrong and fixing it, leaving Nature to mother the eye as she alone can, has resulted in demonstrating in eye troubles what a truly wonderful mother Nature is when unhampered in her work.

In the treatment of diseases of the ear, particularly catarrhal deafness, osteopathic work has achieved a distinct success. The catarrhal deposits and adhesions in and about the eustachian

tube in this instance constitute the lesion and it is through the removal of these by manipulative work that the parts are restored to normal condition and function.

The osteopathic control over other pathological conditions of the ear is largely through the vasomotor nerves that govern the amount of blood distributed to the parts or to some structural condition impinging directly upon the return circulation from the ear, in either case the circulatory disturbances result in lowered vitality, impaired function and possibly an invasion by micro-organisms.

To find what is interfering with the normal physiological processes of the body and, if possible, correct the same — that is the Osteopath's mission in dealing with disorders of the organs of special sense as with the other organs.

CONSTITUTIONAL DISEASES

Constitutional diseases are those that pervade the whole system, such as chronic rheumatism, gout, diabetes, scurvy, rickets, etc., and are due to some break in the chain of events that govern the constructive or eliminative forces of the body. The character of the food itself may be faulty or one or more of the organs that are concerned in the preparation of the food elements for final use

in the body as bone, gland, muscle, etc., lag in performing their functions, or some of the organs whose duty it is to dispose of the ashes of the bodily fires, the waste material, fail in their physiological duty and the result is general or constitutional disorder.

To find where the broken link in the chain may be is the duty of the physician. To the Osteopath, the conditions presented by the symptoms of constitutional disease would point, aside from dietetic errors or local infections, to an interruption to the nerve supply to one or more of the organs that gave evidence of failure of function. The location of the mechanical cause for such interruption and the correction of the same permits again the movement of the constructive and eliminative forces of the body in an unbroken cycle, provided that the wheel of life has not been too greatly damaged by the weakened link having existed too long.

FINALLY

Osteopathy is not a cure-all. There are disorders that are incurable; there are diseases which need surgical attention; an anesthetic is a necessity; a parasite requires an antiseptic; a poison demands an antidote. There are considerations other than mechanical adjustment having to do with the environment affecting the relative pro-

portions in quantity and quality of the life essentials, food, air, water, rest, protection, cleanliness, physical and mental exercise, etc. — all of which enter into consideration in the problem of protecting the body from disease. Yet perfection of bodily structure must be maintained and it is the duty of the physician to assist in such maintenance while giving proper attention to the environment. Life forces he cannot give; tissue he cannot manufacture; tissue builders, except in the form of food, he cannot furnish, discretion that will maintain a proper environment is with difficulty imparted; yet structural perfection he can help to maintain: that accomplished, Nature — the Mother of All — with infinite wisdom maintains in functional harmony, the body which she created and man's responsibility ceases.

Osteopathy believes that all parts of the human body do work on chemical compounds and from the general supply manufacture for local wants; thus the liver builds for itself of the material that is prepared in its own division laboratory. The same of heart and brain. No disturbing or hindering causes will be tolerated if the Osteopath can find and remove them.

— A. T. Still

THE GROWTH OF OSTEOPATHY

FROM AN ADDRESS DELIVERED AT A MEETING OF THE AMERICAN OSTEOPATHIC ASSOCIATION AT KIRKSVILLE, MO.

[Reprinted by permission from the Journal of Osteopathy]

. . .

This is a war not for conquest, popularity or power. It is an aggressive campaign for love, truth and humanity.

— A. T. STILL

Osteopathy has had its necessary growth and development amid surroundings that tested its right to existence at every step.

— GEO. E. MORAN

THE GROWTH OF OSTEOPATHY

By A. G. HILDRETH, D.O.

THE poetry of Osteopathy has never been written. The essence, or abstract, of this great truth which has enriched so many lives has never been, and can never be, expressed in words, for it is so indelibly interwoven with the everyday occurrences of so many different individuals that it will be impossible to collect in one volume the all that goes to make up a complete whole — centralized at first in one man and his family, then divided with others until today it has to do with the lives of thousands and still is being handed on and on. Ah, who dare attempt to write the all of the "Then and Now"? Come with me in your minds and walk over this identical spot of ground some years ago; look at the little five-room cottage, the rooms of which were used as treatment rooms by Dr. Andrew Taylor Still and his sons; see the people scattered here and there around his home and the little office building, with the bus driving occasionally to the door, depositing its invalid or cripple to see the then becoming famous "bone doctor." Note a little frame structure, fourteen by twenty-eight feet, in the course of

construction just in front of the original five-room cottage. Get a glimpse, if you can, of those things as they were, and as they are so vividly painted in the memories of those of us who were here at that time, and you may have some conception of Osteopathy as it was then.

Now turn your eye to the present, compare this building with those described. Look across the ravine at the well-equipped, up-to-date hospital and you will have some conception of the Osteopathy of today. A comparison of the "Then and Now" in material things only at the birthplace of this science is certainly very satisfactory and, no doubt, its progress has far outgrown the fondest anticipations of him who started this great work. But even with all this development achieved here at the parent institution it is incomparable with our growth, development and progress made in the literary, social, professional and scientific world. For more than five years from the beginning of the teaching of Osteopathy, we numbered less than one hundred men and women. Then we were so few in numbers that we could all gather around his knee at one time either in the little cottage, in his home, upon the lawn under the trees, on the steps of his front porch, anywhere and everywhere and drink wisdom from his own lips in all its purity and simplicity. We were so close to the fountain of truth



Photo by Solem

The College in which Osteopathy was first taught in 1892

from whence all this wondrous growth has emanated, that we could not only see the results obtained by the corrective processes beneath the scientific touch of his fingers, but we were forced to absorb from his mind a part, at least, of the inspiration of his thought, his genius and his power.

Again, the results obtained at that time were not only an inspiration, but they were fraught with a knowledge, to those who were privileged to see them, that then and there lay the foundation for future professional careers by which the pioneer practitioners of Osteopathy have contributed so much to the strength, the solidity and the impregnability of the position we occupy today. Then and there were instilled through contact the true principles of genuine Osteopathy that must and will stand throughout all ages as the foundation of the earth's greatest system of medicine. The idea was then in its simplest, crudest, yet purest form. From that point in our history was thrown out an influence so deep-rooted, so pure and so far-reaching in effect that it is not only a part of us now, but is destined to live on and on forever.

Then we were a mere handful; now we are numbered by the thousands. Then one college upon the face of the earth; now some seven or eight. Then our classes for matriculation numbered but a few, now they run into the hundreds. Then one man with a very few assistants taught

all there were to teach, now it takes hundreds to supply the demand. Then there were no practitioners anywhere but at Kirksville and the hopeless cases of all the land contributed their share to make Kirksville and Dr. Still famous. Now our practitioners are scattered all over the world. Then the eyes of the public were centered here and the results obtained were given world-wide comment and notice. Now, good results are being obtained everywhere Osteopaths are located and our good results are so common that they are expected and people are disappointed if they are not obtained. Then when people came to Kirksville for treatment, it was Dr. Still who cured them, whether one of his sons treated them or one of the assistants. Now the results have become so common that little notice is taken of the most seemingly miraculous cures.

Then there was not a spot on earth where a graduated Osteopath could practice his chosen profession as a law-abiding citizen, according to the interpretation of the then-existing medical laws. Now almost every state of the union recognizes us with some form of legislative enactment, with many a splendid law to our credit. This, too, may be said of several foreign provinces. Then the combined influences of the earth seemed against us. Now, we are welcomed everywhere, in the home, the church, the local community, the

state, yea, even by the nations of the earth as a factor for good. The press was a silent factor so far as we were concerned, unless occasionally when we were made the butt of its ridicule. Today, column after column is given to us in the great papers of this country, clothed in terms most complimentary to our work. And the best periodicals now give us page after page of the most readable, educational articles, enlightening the whole world as regards our profession and our progress. Then there could be no systematized organization for the promulgation of our work; we were so few, we could only cluster around this spot hovering in close contact with the original center. But now we have our local, our state and our national organizations that are proving a wonderful factor in our growth.

Whenever I hear people talk of shoals ahead or dangers coming, I cannot help but feel that if they could only have accurate knowledge of all the history of the origin and growth of Osteopathy, they could not possibly feel that way, for there have been so many things that could not but make the men who stood with their fingers upon the pulse of this great movement know that the Master Mind of this universe was guiding its course. It was true "Then" and it is equally true "Now."

To the Osteopath, his first and last duty is to look well to a healthy blood and nerve supply. He should let his eye camp day and night on the spinal column, and he must never rest day or night until he knows that the spine is true and in line from atlas to sacrum, with all the ribs known to be in perfect union with the processes of the spine.

— A. T. Still

OSTEOPATHIC STATISTICS

BY G. V. WEBSTER, D.O.

When Harvey solved by his powers of reason a knowledge of the circulation of the blood, he only reached the banks of the river of life.

— A. T. STILL

The most that any physician can do in treating disease is to render operative the natural forces within the patient's body.

—A. T. Still

OSTEOPATHIC STATISTICS

BY G. V. WEBSTER, D.O.

THE story of osteopathic achievement is told most emphatically by the statistics that have been gathered showing the percentage of satisfactory results in several series of consecutive cases representing a number of different diseases.

Most remarkable was the showing made by osteopathic physicians in the great epidemic of influenza that swept over the country in the fall of 1918. Within the profession and with a considerable portion of the public it was common knowledge, for some years back, that in meeting the ravages of lagrippe or influenza nothing had been found to equal the efficiency of osteopathic treatment both for the amelioration of the distressing symptoms of this disease and the avoidance of the numerous after effects. Yet it took this epidemic, destroying more lives than the Great War, to bring out by actual statistics the evidence of just how efficient osteopathy was under the trying conditions imposed.

A questionaire was sent out by the American Osteopathic Association asking for the data on the care of cases of influenza by members of the profession. The returns were startling in their revelations. The osteopathic claims for efficiency were more than vindicated.

The statistics tabulated from questionaires returned by 1370 osteopathic physicians presented a total of 49,611 cases of influenza treated and only 170 deaths, showing a percentage of less than one-half of one per cent as the death rate from uncomplicated influenza under osteopathic care. The same questionaire showed that in the above number of cases there were 2,943 cases of pneumonia with 307 deaths, or a total of deaths by influenza and pneumonia combined of but 477 from these 49,611 cases. This is a most remarkable showing. From no source where statistics are available has any other method of treatment anything to offer which compares in the least with the wonderful record made by these 1370 osteopaths.

Commenting upon this wonderful record from practically the same statistics The Chicago Evening Post had this to say:

"Figures compiled by the osteopaths thruout the country show that out of 49,000 cases of flu treated, of which between three and four thousand developed pneumonia, only 472 died — a mortality of less than

1 per cent. As nearly as can be estimated, the total mortality from flu thruout the country has ranged from 5 to 15 per cent. If these figures are correct, here is food for thought for doctor and layman alike.

"Certainly every broadminded physician will welcome the news that there is a more successful method of treating the flu than the one he has been using. In fact, many old school physicians have already discarded exploded theories and adopted the most up-to-date methods of fighting disease.

"The above figures, however, indicate that there are many doctors whose ideas concerning the cause and cure of disease are derived entirely from their college text-books.

"The medical profession, for the sake of its reputation, if not for the sake of the human lives involved, will do well to give serious consideration to this matter. It is an even more vital subject for the layman, since it is his life that is at stake. A man who contracts the flu wants treatment and advice that will help him to recover, and not hasten him to his grave.

"The loss of life from the flu so far has been variously estimated at from half a million to more than two million. Suppose a million persons have died from the disease, and suppose that they had all received the same treatment that the 49,000 cases mentioned above received and had responded with the same percentage of recoveries. This would mean that only 10,000 would have died, and that 990,000 of the 1,000,000 would probably be alive today.

"Next to life itself, health is man's greatest posses-

sion. If there are methods in use today of treating the flu and pneumonia, the most dangerous of all diseases, that can hold the mortality down to less than 1 per cent, the people ought to know about it, and the government ought to investigate the matter."

Scarcely less impressive is the work being done for cases of nervous and mental disease by the osteopaths in their sanatorium at Macon, Mo. The statistics for the five-year period presents a very interesting study of the efficiency of the osteopath in the care of these nervous and mental unfortunates.

Total number entering institution	1008
Total number leaving institution	877
Non-mentals and those coming for examination, opinion and advice only	344
Statistical purposes (excluding non-mental and those coming for examination, opinion and advice)	533
Discharged as cured (47 %)	254
Discharged as improved with good prospects for recovery, and recovering entirely after going home.	43
Discharged as cured, a relapse occurring after the return home	36

Statistics from the private records of Dr. J. Deason of Chicago, covering in all the treatment of 5000 cases, show a high percentage of good results in the special field of the ear, nose and throat.

His 2762 cases of catarrhal deafness showed an average of satisfactory results in 76 per cent

of the cases. Favorable results were obtained in 70 per cent of cases that had been unsuccessfully treated by other methods. He also reported 296 cases of acute infection of the middle ear with good results in 60 per cent of the cases. In 172 cases of chronic infection of the middle ear good results were obtained in 60 cases and partial results in 20. In acute infection of the mastoid cells there were good results in 90 per cent of the cases. In chronic mastoiditis numbering 195 cases he found it necessary to advise operation in but 50 per cent of the cases. Dr. Deason reported 2880 cases of "ringing in the ears" and other head noises. Good results were obtained in 70 per cent of these cases. Of 840 cases of enlarged tonsil 80 per cent were treated successfully without operation. Dr. Deason reported the surgical removal of 392 cases of adenoids and tonsils without a complication or post-operative infection and not a case required a second operation. He also reports 372 cases of hay fever with permanent cures of 70 per cent of the cases and good results in 87 per cent; 192 cases of asthma with good results in 80 per cent of the cases and partial results in 10 per cent. Of 256 cases of impaired voice 80 per cent were restored to normal.

One member of the profession who encountered a typhoid epidemic has reported 100 consecu-

tive cases treated osteopathically without a fatality.

While statistics are not particularly interesting to the average reader, yet to the person afflicted they may present evidence of an added opportunity for recovery. Statistics above presented for influenza, nervous and mental diseases and for diseases of the ear, nose and throat show a larger percentage of good results by a very creditable margin than any other known method of treatment.

OSTEOPATHIC INSTITUTIONS

SPECIAL ARTICLE BY C. M. T. HULETT, D.O.

* * *

Osteopathy is knowledge, or it is nothing.

—A. T. STILL

Every great institution is the lengthened shadow of one man.

—Ralph Waldo Emerson

OSTEOPATHIC INSTITUTIONS

By C. M. T. HULETT, D.O.

THE growth of Osteopathy on the side of individual practice is the way it is known to most people. They are less familiar with its institutional growth. Many are hardly aware of the existence of osteopathic institutions. But we want such people to understand that Osteopathy can make a very creditable exhibit in this line.

The profession is well organized. Its national association has over three thousand members and receives and disburses a large sum annually in broad-gauged public work. One hundred twenty-five state and subsidiary societies in this country and Canada serve the more local needs and interests of the profession and patrons. The British Osteopathic Society is active in its field in Great Britain.

Periodical literature of a high order, covering the scientific, professional, public health and popular fields is well supported by the profession. Numerous text-books concerning the various branches of the science have been published by

members of the profession in addition to several brochures, monographs, and popular books and booklets. Both novels and plays, with osteopathic correction of a lesion as a key to the plot, have been received by the American public.

Osteopathy has eight colleges in which young men and women are educated for entering the profession.

The American School of Osteopathy, Kirksville, Mo.

The Massachusetts College of Osteopathy, Boston, Mass.

The College of Osteopathic Physicians and Surgeons, Los Angeles, Cal.

The Kansas City College of Osteopathy and Surgery, Kansas City, Mo.

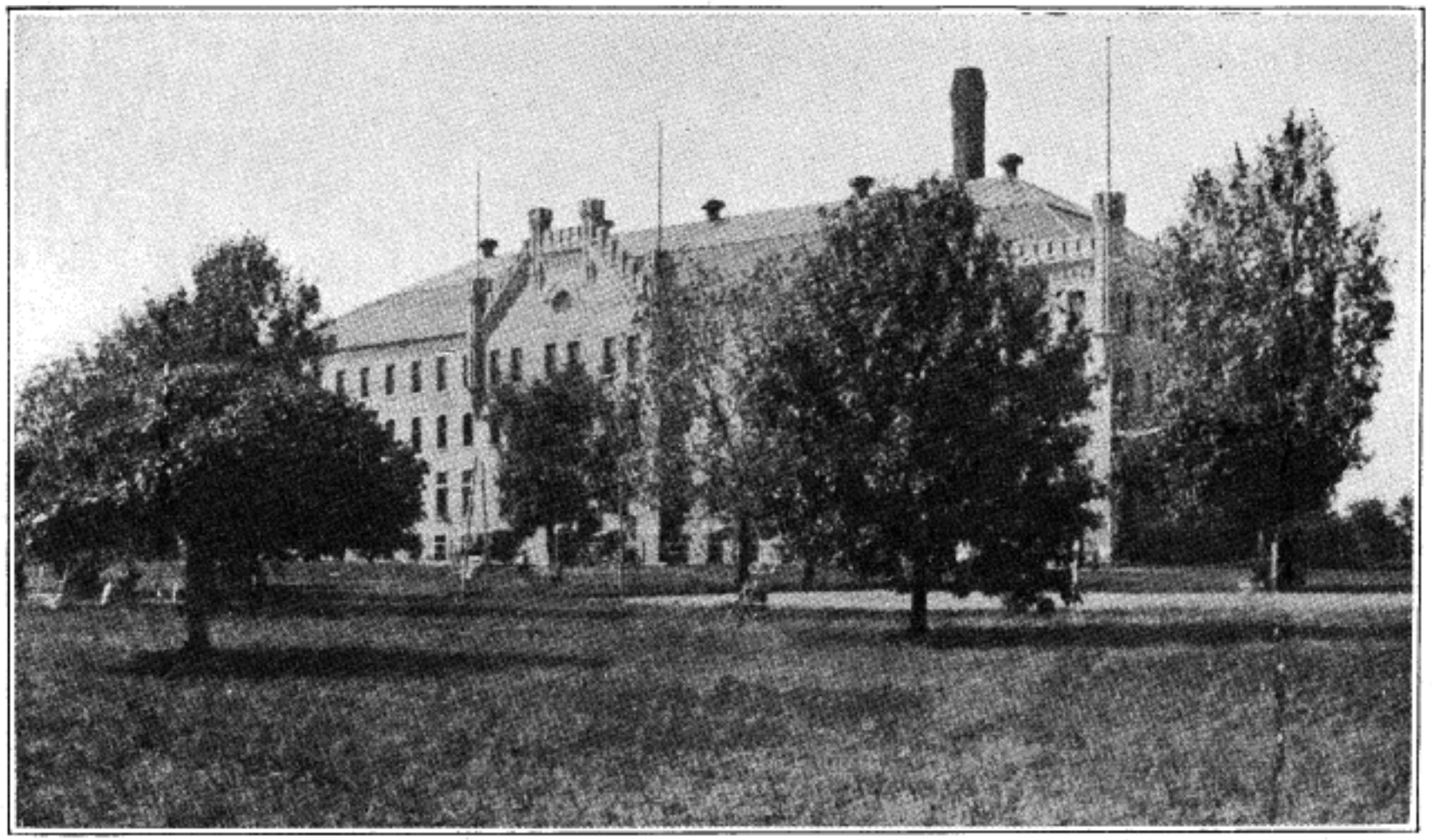
The Central College of Osteopathy, Kansas City, Mo.

The Philadelphia College of Osteopathy, Philadelphia, Pa.

The Des Moines Still College of Osteopathy, Des Moines, Ia.

The Chicago College of Osteopathy, Chicago, Ill.

Including surgery, the course of study is now four years. The curriculum evolved to conform to the osteopathic concept of disease, parallels the medical curriculum and produces thoroughly qualified physicians.



The Still-Hildreth Osteopathic Sanatorium, Macon, Missouri

An institution devoted exclusively to the osteopathic treatment of mental and nervous diseases.

OSTEOPATHIC INSTITUTIONS

Osteopathic hospitals and sanatoriums are too many to name here. Suffice it to say that they are well enough distributed throughout the country, so that any case, surgical or otherwise, may be cared for under osteopathic auspices. The American Osteopathic Association maintains a Bureau of Clinics which assists the local osteopathic organizations in the establishment of public clinics. In some of the large cities osteopathic clinics supported by the profession have been established for the care of such cases as are in need of osteopathic treatment but are unable to employ a physician.

At Macon, Missouri, is a sanatorium dedicated exclusively to the treatment of mental diseases. Very encouraging results have already been obtained in cases of insanity treated there, although the institution has been in operation but five years. The published records of this sanatorium show a higher percentage of cures under the osteopathic care of the various insanities than under any other known method of treatment.

The Woman's Department of the Bureau of Public Health of the American Osteopathic Association is conducting a campaign for woman's welfare, national in its scope.

The Academy of Clinical Research has been organized for the collection and systematization of osteopathic case records. The profession is

co-operating in collecting and preparing the records for the use of the Academy.

Osteopathy strikes a new note in the world's knowledge of disease. As to cause, course and cure, it is the great advance of the twentieth century. It represents a great basic principle correlating a multitude of lesser principles. Research, therefore, has always enlisted the liveliest interest of the profession, and steps were taken early to provide for it. The A. T. Still Research Institute was established for this purpose. Its two chief functions are original investigation, and advanced special teaching for physicians. Located in Chicago, to be convenient geographically, its plans call for extensive laboratory, clinic, and hospital facilities, of the highest order. It is supported entirely by endowment provided by the profession and its friends.

The American Society of Ophthalmology and Oto-Laryngology is an organization of osteopaths, numbering into the hundreds, who are doing special study. Some are practising exclusively in the osteopathic treatment of disorders of the eye, ear, nose and throat. The researches of this organization have brought out some very important discoveries bearing on the treatment of disorders of the sense organs. Particularly conspicuous among these is the osteopathic treatment for catarrhal deafness,

hay fever, migrane and certain disorders of vision.

The profession is rapidly developing specialists in the various branches of therapy until today we can well be proud of the achievements in special lines of osteopathic work. Just to enumerate some of the fields which are being covered by men who have devoted special study and research to a particular line will give something of an idea of the breadth of the profession's work in special fields. Besides the members devoting their full time to eye, ear, nose and throat there are others specializing in the diseases of children, in surgery, in obstetrics and gynecology, in diseases of the skin, in venereal diseases, in orthopedic surgery, in dietetics, in blood diseases, in kidney and genito-urinary disease, in diseases of the heart, in nervous and mental disorders, in diagnosis, in orificial surgery, in glandular diseases and in laboratory technique; so that within the profession may be found competent authorities for the examination and scientific care of practically all the abnormalities to which man is subject.

Osteopathic diagnosis means but one thing: find the cause.

Osteopathic therapeutics has to do with but one thing: the removal of the cause.

—G. W. RILEY, PH.B., D.O.

OSTEOPATHY AND SURGERY

[Reprinted by permission from the catalogue of the American School of Osteopathy]

* * *

Osteopathy has but little use for the knife, but when no human skill can avail to save life or limb without knife and saw, then we are willing to use anything or any method to save that life.

— A. T. STILL

There is back of Osteopathy a lineage of the thought of all of the ages.

— W. L. Riggs, D.O.

OSTEOPATHY AND SURGERY

By GEO. A. STILL, M.S., M.D., D.O.

OSTEOPATHY has prevented so many thousands of useless operations and is so generally opposed to the methods of the old schools that at first thought it might be inferred that it is unalterably opposed to surgery, and that a surgery course would find no part in the curriculum of an osteopathic school.

Such, however, is not the case, as there are many conditions which from their very nature require surgical treatment; and it is not the purpose of Osteopathy to dictatorially oppose anything in the old school that is of real value.

Indeed, when one comes to look at it, surgery and Osteopathy are from their nature more closely related than surgery and medicine. Osteopathy is the physical or manual manipulation of the bodily structures, without instruments, one might say; while surgery in a somewhat different way, it is true, handles the bodily structures physically and manually with instruments.

Efficiency in either must essentially rest on an accurate knowledge of anatomy, supplemented

with physiology and pathology. Every study that must be emphasized in the groundwork or foundation knowledge of one must also be just as much emphasized in the preliminary training in the other.

Medicine, on the other hand, is essentially based on alchemy and mysticism. It is noteworthy that all medical schools refer to themselves as colleges of "Physicians and Surgeons." It is also well to note that "chirurgery," from which we derive the word surgery, really means to "manipulate." It is true that the absolute insufficiency of medicine has made surgery cover a great deal of ground and devise many dangerous operations that with the advent of Osteopathy will be, and indeed are, being made obsolete.

In every case surgery is the complement of Osteopathy. Osteopathy adjusts structures so that healthy nerve and blood supply to the part involved allows it to combat or cure the diseased condition. When, through trauma, violence or other causes, this cannot be accomplished solely by good blood supply, then the local tissues themselves must be grossly readjusted. In childbirth, lacerations, certain types of congenital deformities, certain kinds of tumors, etc., surgery must step in. Surgery repairs cuts, removes tissues so badly diseased or degenerated that regeneration is impossible, and, as suggested,

complements the other part of rational therapeutics.

Thousands of cases that under the unsuccessful treatment by drugs were consigned to surgery are proven by Osteopathy to be readily curable without operation, but for those conditions where surgery is needed, surgery finds not an enemy but an ally in drugless science.

Improbable as it seemed some years back, it is inevitable that in time Osteopathy and surgery (rationalized and changed much from its average status of today) will align themselves against the fallacies of medicine.

Osteopathy, like all other sciences, must grow and develop, as from the nature of things it could not begin already developed. When the school was first organized, surgery was given a minor place. For one reason, the demand for practitioners was so great and so insistent and the supply so small that there was little time to learn things other than Osteopathy. But the success of the early men was so pronounced that the world began to demand that the osteopathic physician be able to do all the things necessary for the health and comfort of his patient which any other physician could do. It is especially noteworthy that aside from anesthetics (and antidotes) this has not and never will include the giving of drugs.

Neither osteopathically nor medically should the practice of major surgery and general practice be combined; and yet the general practitioner must handle emergency and minor surgical cases, must diagnose and advise major surgery, and have a fair understanding of its technique and results, and frequently must give after-treatment.

We have found that post-operative osteopathic treatment benefits as follows:

We almost never have severe vomiting following the operation.

Post-operative pleurisy is practically eliminated.

Post-operative backache is wonderfully decreased.

We have lost no patients from post-operative pneumonia.

Post-operative neuritis is diminished or readily relieved.

Obviously, with all these advantages under post-operative treatment the mortality is wonderfully decreased.

The only credit we are entitled to for this record is that for having the patients treated regulary after the operation by a competent osteopath.

Each year adds to the knowledge that treatment is of immense value in what is otherwise a surgical hospital.

HOW OSTEOPATHY TREATS THE BLOOD

[Reprinted by permission from the Journal of Osteopathy]

* * *

Let the Osteopath follow the course of the blood from the heart to its destination and return, and remove all obstructions, open all doors; for on it we depend for all the joys of perfect form and functioning, which is health.

— A. T. STILL

On every voyage of exploration, I have been able to bring a cargo of indisputable truths, that all remedies necessary to health exist in the human body.

— A. T. Still

HOW OSTEOPATHY TREATS THE BLOOD

By C. P. McCONNELL, D.O.

USING a commercial phrase, the blood may be at par, or it may be below par, as to its real value to the bodily economy. A person may be anemic when there is a diminished quantity of blood, for example, from a hemorrhage, or the quality of the blood may not be normal, as from impaired digestion. It is well known that pure blood is an absolute essential for health. The blood is the medium whereby all organs and parts of the body are supplied with nourishment for repair and growth.

The layman is fairly versed in anemia. He knows that it generally means a low-grade quality of blood. When a physician informs a patient, and he very frequently does, that he is anemic and needs building up, the patient is usually satisfied with the diagnosis. Then come the iron preparations ad libitum as well as many other so-called "tonics," to enforce a better character of blood, but the much abused blood too often sulks and really pays no attention to the "tonics."

Why is it that the iron preparations, for example, are useless when the blood analysis shows a deficiency of the element iron? For the simple reason that nine times out of ten anemia is not a disease but a symptom of some digestive disorder, as is a pain a symptom of some nerve disorder, and more iron is not required in the digestive tract, if the diet is right, but rather the ability to assimilate more iron into the system is lacking. Thus, it is at once seen that we must go back of the symptom (an expression of disease) anemia, and seek the cause, although the symptom may be most pronounced and overshadow all others. The various "tonics" are well known to be empty dreams of past decades. The real tonics, outside of osteopathic treatment when indicated, are plenty of wholesome food, pure water, fresh air and exercise.

There are five ways, at least, by which the blood is influenced and treated by Osteopathy.

GENERAL TREATMENT

It is a common statement of the prospective osteopathic patient that he can see how Osteopathy can improve the circulation, but to attempt to cure an organic disease seems ridiculous. From his limited viewpoint, of course, the utterance is a sincere one. The patient realizes that any exercise or activity of the bodily tissues aids

the circulation, and, to him at first, Osteopathy appeals as a variety of passive movements. The fact of the matter is, the general osteopathic treatment is less potent and precise than most of the other methods of blood treatment.

The general treatment tends to equalize the blood distribution by aiding the heart action, drawing blood to weakened areas and dispersing blood from congested tissues. This treatment affects principally the circulation of the blood as to its distribution, a quantitative effect, and but little, and that indirectly, in a qualitative manner.

LOCAL TREATMENT

The various local treatments for treating the blood are purely treatments of distribution, that is, lessening congestion or reducing inflammation, and increasing the blood to a weakened area or organ. To relieve the congestive headache, the congested liver, an inflamed ovary or a sprained ankle, requires a definite, specific treatment as and where indicated. The same is true to tone up an atonized stomach, a paralyzed muscle or a withered limb.

REFLEX BLOOD INFLUENCES

A congested brain, an inflamed eyelid or some poorly nourished organ may be the result of a reflex vaso-motor neurosis. That is, the little

nerves that control the caliber of the blood vessels may be affected reflexly from some diseased organ or tissue, the same as a pain may be a reflex symptom over a sensory nerve. Cold hands and feet are often reflex vaso-motor neuroses from indigestion. Cure the indigestion and the source of nervous irritation to the vaso-motor nerves of the hands and feet will disappear, allowing the blood vessels to normally dilate and act, consequently a freer blood distribution. This kind of interference to the blood supply may take place in any tissue or organ of the body.

DIGESTIVE AND ASSIMILATIVE INFLUENCES

We have now come to one of the most important methods of blood treatment. Here we really have to do with a blood disease. To influence the blood organically, to give the patient a rich, normal blood, has been the medical problem for ages.

Osteopathic treatment, unquestionably, offers more relief to the anemic patient than all other methods combined several times over. One important way the blood is rendered anemic, that is, poor and deficient in red blood corpuscles, is from indigestion. The stomach, intestines, pancreas and liver not functioning normally, the intestinal juices not digesting the food completely, the tissues of the stomach and intestines not taking

up the digested particles of food wholly and freely, and the blood not assimilating the same as it should, all result in non-assimilation, malnutrition, in a word, anemia. Then, what must be done? Tracing back the nerve supply of these digestive organs to their centers, seeking out the cause of the blockade of normal nerve impulses, and removing the obstructions is what must be done. The Osteopath does this every day of the week in his practice. He finds that weakness and curvatures of the spinal column, misplaced ribs, and contractured muscles are frequent sources of the blockade to digestive nerves and dependent blood vessels. His work is to relieve and readjust the crippled parts — and it is work that he accomplishes most successfully.

Absurd, certainly, to drug and dose the digestive tract proper when the cause is invariably further back, that is, in the nerves and blood vessels controlling the digestive functions. The digestive organs are below par as an effect, the assimilation is poor as an effect, although one point further removed from the cause, and the anemia is the remote effect that caps the climax. Simply a chain of pathological conditions, each symptom or condition representing a link, although the different links do not necessarily complete an unbroken circle, is presented. There is an origin, one link acting as the causative factor.

Always give the anemic a liberal supply of good, wholesome, well-cooked food (there is plenty of iron, etc., in the food; it is a question of ability to assimilate it on the part of the digestive tract), pure water, fresh air in abundance.

THE BLOOD ELABORATING GLANDS

There are certain organs in the body as the spleen, adrenals, thyroid gland, thymus gland, bone marrow, pituitary body, etc., whose functions are little understood, although it is well known that they influence and elaborate the blood. It is not necessary in this article to go into any detail concerning facts as well as various theories about the functions of these organs. Suffice it to say, that they are organs that have secretions and functions that profoundly affect the health of the blood and as a consequence other tissues indirectly. Osteopathy treats these organs and their disorders successfully, and thus the blood.

Osteopathy also offers much along the line of treatment of rendering and keeping the blood germicidal. Consideration of the germicidal constituents of the blood, or alexins, is important but hardly comes within the scope of this article.

An equivalent to health is pure blood, normal in amount and freely circulating.

OSTEOPATHY AND THE GERM THEORY

[Reprinted by permission from the Journal of Osteopathy]

* * *

Has chemistry ever detected a failure in the normal processes in the fluids of life? Has it ever found imperfection in the fluid itself, or in any part or principle of the whole economy of life?

— A. T. STILL

A fact may and oftentimes does stay before our eyes for all time powerful in truth, but we heed not its lessons.

— A. T. Still

OSTEOPATHY AND THE GERM THEORY

By R. E. HAMILTON, M.Pd., D.O.

PRACTICALLY all the demonstrated facts of bacteriology are in strict accord with the principles of Osteopathy as laid down by its founder and each year the theories regarding the cure of diseases in which bacteria play a part come closer to osteopathic ideas.

In the present theory of bacterial infection, the following facts are well established. Of the countless varieties of bacteria only a few are capable of producing or influencing the course of disease. The conditions for infection are virulence of the germ, its large numbers and weakness of the tissues. This last is in most cases a cardinal condition, for it is now proved that the tissues and fluids of the body are normally resistant to the action of bacteria and that bacteria may scarcely ever find lodgment in healthy tissue. This is in complete accord with the osteopathic idea that injury to an organ may come only through obstruction to blood and nerve supply (including disturbances in other parts of the

body), lack of use, overuse, or direct injury from external forces.

It is perhaps true that the virulence of germs may be such that a few of them may set up disturbances in a healthy organism, but these cases as disease producers are undoubtedly rare. Some of the conditions lowering the normal resistance of the body to germ diseases are under-feeding and feeding upon foods lacking in some element necessary to the body; prolonged exposure to cold; intoxication by alcohol or other drugs; traumatic injury; severe hemorrhage; fatigue; depressing hygienic conditions and disease.

HOW TO PREVENT INFECTIOUS DISEASES

Reasoning from the above given causes of bacterial diseases, the answer to the question, how to prevent them, is simple. First, keep the body in the best possible condition; then, avoid the chance for contact with disease-producing germs.

To maintain the health of the body, the well known rules of hygiene must be observed. Eat the things which are known to agree with your digestion; exercise moderately; rest and sleep regularly; avoid excesses and exposures; and have corrected the bodily disturbances due to the accidents of life.

Since nearly all disease germs flourish in dead animal and vegetable matter, obviously, cleanliness of person and surroundings is the best means of avoiding contact with infectious germs.

The approved methods of removing and destroying infectious material are by the use of soap and water, exposure to heat, exposure to sunlight, and the use of chemicals. All these are effective under the proper conditions so long as the germs are outside the body.

THE CURE OF GERM DISEASES

Ever since the discovery of disease-producing bacteria, physicians have worked eagerly to find some drug which would kill disease germs after they had lodged in the tissues. On account of the numerous reported internal antiseptics, there is a rather firmly grounded belief in the minds of the majority of the laity that drugs are able to kill infectious germs in the body substance. This belief has also been held by part at least of the physicians, but is being rapidly abandoned. A few quotations from the writings of [1] Sir Almroth E. Wright, one of the greatest bacteriologists of today, will show the present status of antiseptic dosage.

[1] Sir Almroth E. Wright, English bacteriologist, discoverer of opsonins — noted for his discoveries in bacteriology.

"For some time past it has been all but universally recognized that it is futile to attempt to check bacterial growth in the interior of the organism by our present antiseptics which have a greater affinity for constituent elements of the body than they have for any bacteria."

"Significant in this connection appears to me the fact that antiseptics are now by general consent abandoned in the treatment of ordinary surgical wounds. Significant also is it that the practice of introducing antiseptics into abscess cavities, which was erstwhile so common, is now less and less frequently resorted to. Significant again is it that the treatment by antiseptics in case of bacterial invasions of mucus membranes is today more and more frequently followed up by curetting, scraping and so-called radical operations. Above all, significant is it that so distinguished a dermatologist as Sabourand [1] should sum up the results of antiseptic treatment of bacterial disease of the skin as follows: 'Curious indeed is the failure of antiseptics in connection with the treatment of bacterial diseases of the skin. Quite colossal were the expectations which were entertained with regard to what would be effected by these. What antiseptics have accomplished by their agency is in point of fact next to nothing. The results which have been obtained in connection with pulmonary infections by antiseptic inhalations and in connection with bacterial infections of the genito-urinary passages by "urinary" and other antiseptics are, I am persuaded, neither better nor

[1] Sabourand, French dermatologist, head of the greatest skin clinic in the world.



Still College of Osteopathy, Des Moines, Iowa



College of Osteopathic Physicians and Surgeons,
Los Angeles, California

worse than those which have been obtained in connection with diseases of the skin. Now all of this failure of antiseptics is, I am persuaded, only what might have been expected.'"

THE BODY'S DEFENSE

Having seen that germicidal drugs are worse than useless for curing infectious diseases, let us examine the defense of the body against bacteria and their poisons. Most noticeable of the body's germ destroyers are the white cells of the blood, the action of some of which — the phagocytes — is to ingest and destroy the invading organism. There are also some tissue cells which possess this property. But the body has other defense in the activity of substances detrimental to the growth of bacteria and antidotal to their toxic substances. (See the theories of Metchnikof,[1] Büchner, Ehrlich and others.) All experiment goes to show that the more nearly normal the body organism is, the more of these "anti" substances can be produced for defense against disease.

[1] Metchnikof, late bacteriologist at Pasteur Institute. Well known because of his writings on kumiss and old age. Büchner, German bacteriologist, inventor of process for extraction of enzymes. Ehrlich, German "wizard of chemistry." Discoverer of numerous compounds.

ARTIFICIAL SERUMS

It has somewhat recently been discovered that in defense against mild infections, antitoxins were produced in excess in the blood and many experiments have been performed for the purpose of determining if this excessive activity of the blood could not be made use of by producing "animal-made" antidotes for bacterial poisons. With a few exceptions, these experiments have been failures. The apparent success of diphtheria antitoxin has encouraged great hopes in this line of work.

Contrary to the general idea, the theory of antitoxins is not in conflict with osteopathic theories of disease (which, by the way, have from the first recognized the importance of antidotes to poisons), the osteopathic idea being, as before stated, that the body furnishes its own cure. If we are able to make one animal manufacture an antidote to bacterial poisons for another one, we have simply gained a new antidote to poisons. It is not within the province of this article to discuss serum therapy, but it should be added that the question of antitoxins is much more complicated than the uninitiated would suspect, and there are many, and in some cases insurmountable, difficulties in the way of successful antitoxin application.

THE RATIONAL CURE

Taking into consideration the facts as above set forth, the physician is able to assist in the cure of infectious diseases by the following procedures:

1. Placing the patient in the best hygienic surroundings with fresh air, quiet and rest (in acute cases).
2. Since nourishment is a factor in infection, he may see that the patient gets the best food possible for his condition.
3. He should find and remove any other cause of weakness, so-called constitutional treatment. It is in this third condition that the Osteopath claims the superiority of his methods of handling cases of bacterial diseases, for we can find no physiologic reason for the administration of drugs for the purpose of effecting a cure.

These causes of weakness are as follows: Impediments to the blood and nerve supply to the stomach and intestines, (the source of nourishment); to the kidneys, (the organs of elimination); to the heart, (the blood distributor); to the lungs, (the organs of respiratory exchange); and to the brain and spinal cord, (the controlling factor for all the rest).

It is a common occurrence for physicians to stimulate one or more of these organs in acute fevers, but obviously this is like whipping a tired

horse and may be fatal when reaction sets in. How much more logical it is to give the organism the best possible opportunity by removing all obstructions and letting it do its work in its own way.

The tendency of all nature is toward the normal condition and natural force is the great healer in all disease.

THE VALUE OF OSTEOPATHY TO THE CHILD

[Reprinted by permission from the Journal of Osteopathy]

* * *

We love every man, woman and child of our race, so much that we have enlisted and placed our lives in front of the enemy for their good and the good of all coming generations.

— A. T. Still

Ignorance, the mother of intolerance, bigotry and superstition, the arch enemy of all progress, is responsible for a great deal of this world's suffering, including many of the disorders of childhood.

— Geo. W. Reid, D.O.

THE VALUE OF OSTEOPATHY TO THE CHILD

By MINA ABBOTT ROBINSON, D.O.

IT is the duty of every osteopathic physician not only to treat the various maladies of children, but to teach the parents how to keep their offspring physically strong and healthy, as many serious diseases might be prevented by regular and careful physical examination of the child. Parents should be told that the careless handling of infants often produces lesions of the delicate structures. If these lesions are allowed to remain uncorrected, they may mean suffering and even invalidism in later life. We call to mind a case where a parent persisted in swinging a child by its arms, producing upper dorsal and rib lesions. As a result the child developed asthma, which was finally cured by osteopathic correction of these lesions. How often just such cases do not have the good fortune to receive the proper treatment!

Again, through the ignorance of the parents many children develop spinal curvatures, induced by faulty postures during the time of development

of the physiologic cervico-lumbar curves. We find many curvatures and various abnormal conditions of bony structure, brought on by allowing school children to assume careless and wrong positions while reading and writing. Of great importance to the growing child is the correct position in standing and walking, as a good carriage, with chest well forward, means better oxygenation, as well as a correct and better position and relation of pelvic and abdominal viscera. Then, too, there are the inevitable falls and blows which may produce direct lesions, thereby lowering resistance and paving the way for disease.

Hence the importance and necessity of having children examined, at least twice a year, and particularly following falls or injuries of any kind, by a competent Osteopath, since the early recognition and correction of any abnormal condition that may predispose to or maintain disease, will not only relieve suffering but will make for a stronger and better race by preventing the development of chronic pathologic processes.

Humanity owes a debt of gratitude to Dr. Still for having given to the world a system of therapeutics that can do so much in the prevention of disease by keeping children well and strong.

WOMAN AND OSTEOPATHY

[Reprinted by permission from the Osteopathic Magazine]

* * *

We are to improve upon the failures of the past and give the people a science of healing with a philosophy that will feed the minds of the thinking.

— A. T. STILL

Osteopathy possesses the greatest therapeutic agent known to science. That agent is simply nothing more than the adjustment of structure.

— Geo. M. Laughlin, D.O.

WOMAN AND OSTEOPATHY

ROBERTA WIMER-FORD, D.O.

RECENTLY, at an afternoon gathering a prominent lecturer was asked, "What are the greatest things the past century has brought to women?" He replied, "Equal suffrage and Osteopathy." Without stopping to discuss the first, we agree with the second.

It was a wonderful thing for the world to learn that Osteopathy could safely carry a babe, from the day of his birth through all the experiences, conditions and vicissitudes of dentition, measles, mumps, rashes, indigestions, whooping-cough, the green apple period and the thousand other little aches, without one drop of drugs!

That it could chaperone the girl through adolescence into maturity, causing her to arrive well, strong, rosy, athletic, free from "nerves" and their accompanying consequences seems marvellous.

But perhaps its crowning success was its ability to remove from women the terrors that for ages have been associated with parturition and its preceding days.

To experience the speedy banishing of the unspeakable wretchedness accompanying "morning sickness," to be certain that the various aches and distresses that arise throughout the whole period could be routed, to know the hours of labor would be much shortened, and the pains greatly lessened, certainly was a wonderful emancipation for half of the race.

Reflecting on this experience, and this knowledge, and on the facts that babies born of mothers who had had osteopathic treatment during gestation and parturition were stronger, more robust and happier, and that the mothers themselves recovered their strength more rapidly and were able to preserve good figures, — wasn't it the most natural thing that the lecturer should speak of Osteopathy as one of the best gifts of the century?

When it became generally known that constipation, flatulence, and the depressing train of symptoms associated with indigestion and headaches could be banished permanently by Osteopathy, and when it was shown that backaches, legaches, and all the other aches intruding upon the menstrual period, instead of having to be endured, as women had for ages done, supposing it to be their inevitable fate, could be cured without drug or knife, and all these nightmares of suffering relieved or prevented entirely, thou-

sands of women everywhere sought the services of Osteopathy and sang its "hallelujahs." While for the woman experiencing the menopause, "change of life," or to one with nervous exhaustion, the comfort and benefit that Osteopathy affords is almost past belief.

Thus it has been shown that from the minute of her arrival into this existence to the hour of her departure, Osteopathy is the intimate, personal, constant friend and benefactor of womankind.

The osteopathic concept of the human organism conflicts seriously with the old order of beliefs. It is purely scientific and insists that the explanation for abnormal functions is true both as to physical and psychical nature and must be explained by and through defective anatomy, or defective adjustments of part to part in the organism as a mechanism; holding firm to the truth that every activity performed by the organism, either physical or psychical, that concerns us as physicians, is the product of cellular activity, whether desirable or undesirable in character. When the functioning is of an undesirable nature, the explanation thereof must be present in the organism, just as a desirable function has its foundation in structure.

That this view of the organism is a truth, is very difficult of acceptation by many. It furnishes the explanation of why so many are unable to accept the osteopathic point of view. To do so necessitates a readjustment of many views which have been held since the earliest years of life. These old beliefs do not die without making protests.

—C. B. ATZEN, D.O.

OSTEOPATHY A PREVENTIVE OF DISEASE

I have long believed that an engineer of the human body was the sick man's only hope.

— A. T. STILL

Osteopathic treatment is prophylactic because the physical defects in the anatomical structure may be discovered long before they begin to create much disturbance in function.

— Orren E. Smith, D.O.

OSTEOPATHY A PREVENTIVE OF DISEASE

By G. V. WEBSTER, D.O.

PREVENTION is today the key-note of all thought having reference to disease. In the past the greatest consideration was given to the element of cure, but with the advance of hygiene, dietetics, and sanitation the thought is concentrating more and more about the idea of prevention. Prevention is acknowledged as better than cure and efforts are being directed to make the ideal a reality.

The idea of prevention has three phases, two of which are commonly recognized by hygienists and sanitary engineers. The first is the application of preventive hygiene to society and the second is its application to the individual, the component of society. The third consideration is distinctly a contribution of the osteopathic school, going beyond the general sanitation of a social group and the hygiene of the individual to the hygiene of each of the twenty-six billion cells that go to make up the structure of that individual.

Dr. Still has expressed it, "All of the blood must move all of the time in all parts to and from the organs." And again, "A disturbed artery marks the beginning to an hour and a minute when disease begins to sow its seed of destruction in the human body. The rule of the artery must be absolute, universal and unobstructed, or disease will be the result"; for the blood stream carrying the nutrition to and the waste material from the individual cells, which are bathed in lymph, accomplishes the hygienic supervision of the life of each cell.

This is wherein Osteopathy scores a point in advancement over accepted means of sanitary and hygienic prophylaxis. It recognizes and employs all the scientific teachings of sanitation and hygiene and at the same time carries the health campaign beyond the individual to the individual cell. As society is made up of individuals, so the human organism is made up of cells, and in the last analysis the health of the community, of the individual and of the component parts of the individual are all primarily dependent upon the integrity of the unit of animal life, the cell.

"The individual cells of the body depend on the supply of nourishment brought to them by the circulating fluids of the body. The protoplasm of the cell is a complex, chemical substance made up of an enormous

number of complex molecules. These molecules, on account of the looseness of the combination of their atoms, require sufficient crude material brought to them to maintain the proper atomic tension. Upon this tension is based the resistance to normal or abnormal stimuli. The necessary food for cell protoplasm is brought to the cells by blood and lymph. Since cell protoplasm is entirely dependent upon the circulating media, any disturbance of these media changes the metabolism of the cell, and hence a change in resistance results. This resistance may be varied by failure on either the arterial or venous side of the general circulation, resulting in changed lymph circulation. The constant removal of katabolic products (broken down tissue), is of as much importance as the constant renewal of material for anabolism (tissue construction)."

— DAIN L. TASKER, D.O. (*Principles of Osteopathy*)

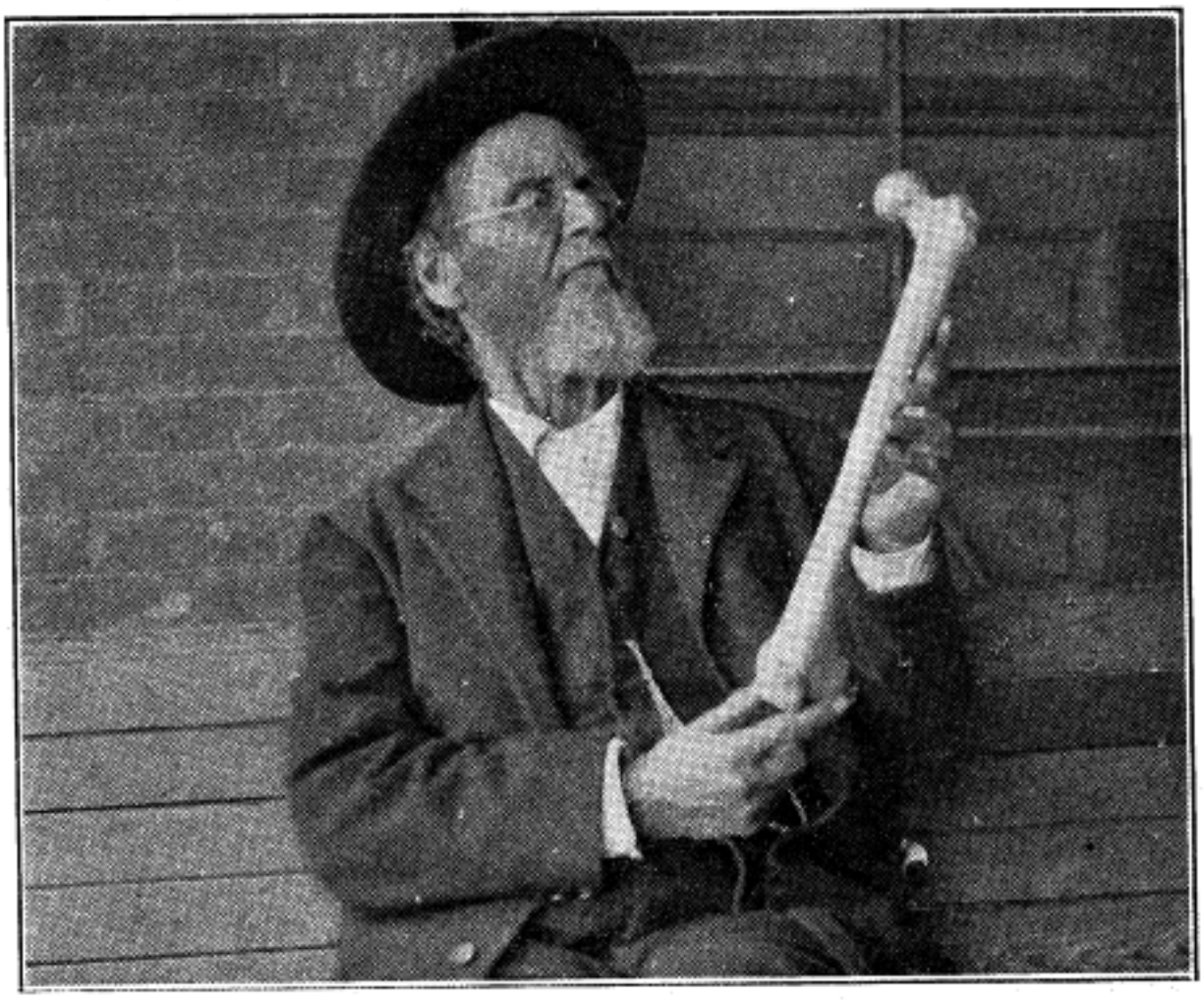
Osteopathy, by recognizing mechanical disturbances in the body as an interference with the local or general cell life of that individual, is able by means of corrective treatment to promote the normal flow of blood, lymph and nerve forces in the body, upon which cell life depends for its integrity, and so becomes a most potent factor in disease prevention.

Dr. Geo. W. Riley, in the Britannica Year Book (1913), gives a few paragraphs as follows, which describe the position of Osteopathy as a prophylactic measure:

"Osteopathic prevention or prophylaxis comprises: systemic examination for incipient lesions, and their correction before function becomes disordered; individual hygiene and right-living; public education in the correct use of the body to avoid structural injury, and in sanitation and all conditions conducive to favorable environment of life. It is a complete system of the healing art.

"Osteopathy teaches the self-sufficiency of the normal vital mechanism. In other than normal conditions this principle powerfully manifests itself; the hypertrophy of the heart muscle in valvular insufficiency, the healing of a wound, the recovery of the body from 'light-attack' diseases without any treatment, are all instances of the self-sufficiency of the body to repair pathological conditions, traumatic and otherwise. Every healed wound, every hunch back, every particle of scar tissue, every adhesion, is but a mute witness of the self-sufficiency of the mechanism, of the efforts of Nature to heal disease, and they bear further witness that it was only due to the severe and persistent impairment of the mechanism of the body that complete repair was not effected. The more intensive the study of the minute mechanics and functioning of the body, the clearer becomes the law of its self-sufficiency.

"The discovery of opsonins and anti-bodies and their efficacy, together with that of the thyroid and other glandular preparations, is a mark of gradual recognition and acknowledgment of the self-sufficiency of the body, when normalized and mechanically stimulated to the maximum exhibition of its reparative and auto-



The "Old Doctor" Studying a Femur

"The better I am acquainted with the parts and principles of this machine — man — the louder it speaks that from start to finish it is the work of some trustworthy architect; and all the mysteries concerning health disappear just in proportion to man's acquaintance with this sacred product, its parts and principles, separate, united or in action. It is an honor to its Builder who should be respected for the perfection set forth and shown by man as a product of Life and its constructive intelligence."

— A. T. Still

protective processes. One of the missions of Osteopathy is so to normalize and stimulate the vital mechanism that it will manufacture in all necessary abundance its normal supporting and protecting chemical compounds absolutely pure and sterile."

Every system of curing human ills which is based on the known facts of anatomy and physiology will last, because it is true. When systems of drug medication are known only as history, Osteopathy will be ministering to the human race, because it knows no other path than that which leads to greater truths in physiology and anatomy.

—DAIN L. TASKER, D.O.

A COMPARISON

[Reprinted by permission from Journal of the American Osteopathic Association]

The machinist or engineer who would conduct the human body from the abnormal condition which is disease, to the normal which is health and happiness, must think and do as a mechanic or his effort will be a failure.

—A. T. STILL

Osteopathy is the name of that system of the healing art which places the chief emphasis on the structural integrity of the body-mechanism, as being the most important single factor to maintain the well-being of the organism in health or disease.

—C. B. Atzen

A COMPARISON

By C. B. Atzen, D.O.

I WILL use the automobile as a means of illustration, because the automobile is the nearest to the living organism in the form of a man-made machine. The laws of three distinct sciences are applied to operate an automobile; viz., chemistry, physics and psychology.

The automobile has a chemical intake consisting of gas, air, oil and water. It is a complex machine made up of hundreds of different mechanical units, utilizing this chemical intake and transforming it into motion. This we call physics. A chauffeur controls the machine in the direction in which it is to go. He is not the chemical or physical element, as he deals with mental processes. His is the part of psychology. These same three factors are operating in human life.

You have a chemical intake consisting normally of food, air and drink. You have a complex body-mechanism made up of untold billions of body-cells; each one of these cells acting as a physiological unit to transform the chemical intake into body-cell physics. Here we are not dealing directly with chemistry, but with physics; body-

cell activity. Then we have within our bodies a mind, by means of which we direct the character of the activities we perform.

Presenting it in this way you can see that we have these three fundamental factors in the automobile and similarly in the human body.

If schools of healing were classified upon these three fundamental aspects of the body's function it would be possible to have but three distinct systems of healing, viz., the drug school, the mechanical school and the mental school.

Each of these schools emphasizes a distinctly different fundamental factor as the most important to the organism's well-being; hence each school attacks the problem of healing from different angles.

If the automobile is out of order you cannot fix it by any other means than by that of adjustment. We are not dealing here with chemistry or psychology, but with a physically deranged machine, and restoration of its physical impairment is the only possibility of restoring it to functional efficiency.

It is likewise by adjustment of the body-machine that we restore it to functional efficiency. Our position is that the human organism is subject to the same laws of physics as is the automobile.

THE RESULTS OF OSTEOPATHIC PRACTICE

* * *

Now, Lord, we beseech Thee, once in a great while to pummel our heads with the hailstones of reason.

— A. T. Still

Osteopathy today represents the substitution of spinal treatment for internal medication. It has no fight against the bathtub and the diet kitchen but against pills and Peruna.

— **Geo. A. Still, M.S., M.D., D.O.**

THE RESULTS OF OSTEOPATHIC PRACTICE

By G. V. WEBSTER, D.O.

WHEREVER the banner of Osteopathy has been raised, victories have been achieved. Structural and environmental adjustments have been made; suffering has been relieved, and individuals have found life more tolerable because of osteopathic ministrations.

The results of osteopathic work in the aggregate make a very creditable record. Diseases which were considered incurable have yielded to the knowledge-guided fingers of the Osteopath. Lives which were apparently approaching an end have had years of grace added. Many who were incapacitated for the duties of life have been restored to full fellowship among their brother workmen. The comfort and efficiency of unnumbered thousands have been increased. As an economic proposition, the world has much to thank Osteopathy for, both as a curative and as a preventive measure. Of course all suffering has not been banished from the human family, and from the nature of things cannot be until the end of time,

but Osteopathy most certainly is a step toward such an ideal.

The laws of Nature are absolute. They do not falter or fail. This is why Osteopathy, in releasing from the bondage of abnormal pressure the natural forces of the body, secures a definite result. The action of the law suspended by the abnormal pressure has again been put in operation. This result has been repeatedly demonstrated clinically and experimentally. Nature with her law is constant and trustworthy. Failure may be the fault of the physician or of the patient but not of the principle of Osteopathy nor of the law of Nature, within her limitations.

"The diseases that are osteopathically curable, we believe, are coextensive with the limit of Nature's ability to react to a pathological process, which means that this class includes every disease in which the pathological process has not advanced to such a stage as to be beyond Nature's own reactive power. In other words we believe that this class includes all diseases in which Nature has not been perverted beyond her limits of compensation. What is curable from Nature's standpoint is curable from the standpoint of Osteopathy, for we look on them as synonymous."

"From this standpoint it might be asked why Osteopathy is powerful in combating disease. We know, from clinical experience, that there is developed around the articulations of the vertebrae a tissue-perversion either antecedent to or concomitant with

disease of the organism elsewhere. This tissue perversion is manifested by impaired mobility of the spine, and the restoration of a normal degree of movement between the articulations means that the tissues have been normalized in this region. Nature wants to be used well, and she is able to function perfectly, provided she is not taxed beyond her capacity for reaction. By restoring normal movement in the spine, we give Nature, in very many cases of disease, the necessary assistance to enable her to combat the condition successfully." — Arthur S. Hollis, A.B., D.O. — *Bulletin of the Atlas Club.*

The osteopathic physician is responsible for the results of treatment in so far as the acquisition of a knowledge of the normal and abnormal in the body is concerned and the exercise of diligence in the effort to correct the structural abnormalities. The patient, too, has certain responsibilities in regard to results which are secondary only to those of the physician. If he expects his osteopathic physician to accomplish something for him, he must understand that the Osteopath is working in harmony with natural laws and must have time in which to right the conditions which are wrong and to place them in harmony with those laws. The patient sometimes forgets that the disease may represent the sum of several factors which may have been in operation over a long period of time and that it takes time to correct

and overcome. In acute diseases, however, the results of treatment are quickly noticed; in long-standing conditions it may be weeks before definite changes can be observed. But whether the results are spectacular, as they sometimes are, or come only after patient effort on the part of the physician and patient, or not at all — when nature has been passed in limitations — the sum of the results total a great benefaction to humanity.

The osteopathic idea being in such close harmony with natural law is revolutionary. Tradition has been overthrown by it. The results of osteopathic work and education on public thought have removed much of the mystery of disease, showed the all-sufficiency of unhindered Nature, demonstrated that structural perfection is a prerequisite of functional perfection and recognized the wisdom of the Creator in establishing definite laws of life for his creatures.

To many individuals who have accepted its teachings, Osteopathy has brought greater freedom from suffering, from fetich, from experimental practice, from dependence upon drugs. For such it has created a new view-point of life, a new philosophy — a new hope with dependence upon Natural Law.

OSTEOPATHY IN THE FUTURE

FROM AN ADDRESS BY RUSSELL DUANE OF THE PHILADELPHIA BAR GIVEN BEFORE A GRADUATING CLASS OF THE PHILADELPHIA COLLEGE OF OSTEOPATHY

[Reprinted by permission from the Journal of the American Osteopathic Association]

* * *

Since the child Osteopathy has grown to full manhood, it has received a hearty welcome, just in proportion to the capability of the intelligent man or woman to comprehend enough of the physical laws to know the reliability of Nature.

— A. T. STILL

Use no man's opinion, accept his works only.

— A. T. Still

OSTEOPATHY IN THE FUTURE

By RUSSELL DUANE

THE great Doctor Still once said "Osteopathy is a science fifty years ahead of the times." In the spirit of this remark let us try to forecast the future of the profession, and picture to ourselves what its stature is likely to be fifty years hence after the times have caught up with Osteopathy.

Probably the most characteristic single medical thought of our day is the idea that "prevention" of diseases is more certain in its result, and in every way preferable to an attempted "cure." Measures of prevention have in recent years occupied a position of increasing importance, both with our public authorities and with the medical profession. By the end of the next half-century, with the growth of popular intelligence, which may reasonably be expected within that time, this idea of "prevention" is likely to control the habits and practice of the entire community. With that development will naturally come about a corresponding progress in those branches of medical science and medical art, which have as

their direct aim the production and maintenance of health as contrasted with those branches which are merely available to cure existing illness.

In the science of Osteopathy the element of prevention is at least equally prominent with the element of cure, and hence Osteopathy is certain to share in the progress of popular intelligence toward the universal use of preventive measures. Osteopathy is well adapted to cure the patient of manifold ills; but an even more important function of Osteopathy is the removal of causes likely to produce ills. Osteopathy aims at catching the patient before he becomes too much of a patient. Its object is to rectify the irregularities of bony structure and tissues before the aberration becomes so great as to induce active disease.

In many cases this physical derangement is so slight that the person in question has no consciousness that anything is wrong, yet there exists in that person's organism an ever-present source of irritation and disturbance of function, which in time may grow to serious proportion.

At the present moment, the community generally does not appreciate the need of having minor structural derangements corrected. The field of Osteopathy is unfortunately curtailed through the ignorance of a large part of the public as to what it is, its past history, the scientific theory underlying it and the character of the cures which it has

effected. Fifty years hence the community will recognize the fact that Osteopathy affords the most effective means known to medical science of correcting physical errors and defects having the most untoward possibilities. Today every intelligent man recognizes the importance of having detailed scientific care given at stated intervals to such portions of the body, for example, as the eyes and the teeth, and he recognizes that such attention to be efficacious must be given promptly and with regularity. In time every man of intelligence will apply the same wise rule to the remainder of his physical structure, and even when in apparent health will seek examination and, if necessary, treatment at intervals from his Osteopath with the same care which he now exercises as regards his oculist and dentist.

There is excellent reason to believe that the growing employment of Osteopathy in the prevention and cure of disease will be accompanied during the next half-century by a steadily increasing application of its methods to cases of traumatism. Osteopathy is peculiarly adapted to the relief and cure of injuries occasioned by violent accidents. For illustration, I would like to point to a case, which came to my knowledge, of a patient who sustained disturbance of several vertebral joints of the neck as the result of a violent fall from a horse. By osteopathic means a

complete cure was effected in less than half an hour after the injury, which without it would probably have resulted in life-long deformity.

Now, if Osteopathy is promptly applied to the replacement of disturbed members and the restoration of proper circulation, muscular and nerve action, the causes of nervous disturbance may be eliminated and a speedy cure accomplished.

I now approach the interesting subject of the probable relations which will exist fifty years hence between Osteopathy and the various industrial pursuits. In the matter of treatment of accidents Osteopathy comes into close relation with the practice of my own profession of the law. This fact affords to all lawyers an exceptional opportunity to promote the welfare of their clients, by advising such injured persons to undergo Osteopathic examination and treatment for the purpose of curing their injuries. I believe the time will come when every well-informed and right-thinking lawyer will consider it his duty to his client not only to render him the best possible legal service, but also to advise him as to the most effective means of relieving such physical injuries as he has sustained.

I will also indulge in the prediction that in another half a century the great public service corporations will keep in their employ a staff of Osteopaths whose duty it shall be to administer

treatment to injured passengers, employees and other claimants. Such a system today, if well-equipped and maintained, would mean life and health to thousands of unfortunate victims, and reduce the yearly accident bill of the railway corporations of the United States many millions of dollars.

I believe that the observed benefits of Osteopathy in the treatment of accident cases will in time lead to its general adoption as an important element of industrial efficiency in the operation of large industrial plants. The ideal future of Osteopathy will be realized when every employer of labor will regard it as not only his duty, but also to his interest, to cause each of his employees to be examined by a competent Osteopath, and all needed treatment given at the employer's expense for the purpose of putting the employee in a sound physical condition. A moment's reflection will make it obvious that the body of an employee is simply a piece of machinery operating in a productive process. In more than a dozen of its aspects we can compare it, for example, with a locomotive or motor-car, although it is infinitely more complex because adapted to many more uses. If a "part" of a locomotive or motor-car becomes broken or bent, or there is an "interference" of parts, not a moment is lost in taking it to the machine shop. The same intelligent care

should be applied to the human machine. The cost would be a legitimate expense in the conduct of business, as legitimate as the expenditure made for repairs or oil in the operation of an engine. The public will some day realize that very few persons ever become ill who have been put in good osteopathic condition at a time when they were apparently well.

I also predict that the next half-century will witness a constantly increasing association between the profession of Osteopathy and public philanthropy.

I foresee a time when through the instrumentality of our great public charities, Osteopathic treatment will be furnished, to those who need but cannot get it, as a part of a scientific system to accomplish their restoration to, and maintenance in, a condition of active industry and economic self-help. There will come a time when every well-equipped hospital will have its corps of osteopathic doctors just as today it has its corps of medical doctors and trained nurses. There ought to be, and ultimately will be, concurrent action and harmony of feeling between the various branches of the medical profession now so radically divided. In time the medical practitioner will, as a matter of course, call in and consult the Osteopath in cases needing his skill, and the Osteopath will as freely call in as a consultant the medical

practitioner, in order to secure his professional aid in such cases as may require it.

In time Osteopathy, in many classes of cases, will probably become the exclusive method of treatment recognized and enforced by leading practitioners of all schools of medicine.