

The Journal of Osteopathy

January 1914

Vol. 21, No. 1

Reproduced with a gift from the Auxiliary to the Missouri Association of Osteopathic Physicians & Surgeons, D.O. Care Fund

May not be reproduced in any format without the permission of the Museum of Osteopathic Medicine,SM

The JOURNAL of OSTEOPATHY

The Magazine of the Profession

JANUARY, 1914

IN THE NEW AMERICAN ILLUSTRATED YOU GET

OVER 5000 NEW WORDS

In this new (7th) edition of the AMERICAN ILLUSTRATED DICTIONARY you get all those hundreds of additions to the terminology of the medical sciences. Whether the new words relate to serology, physiology, pathologic chemistry, bacteriology, experimental medicine, clinical medicine, any of the therapies, surgery—you will find them all here, and in hundreds of cases ONLY HERE. You will find more words here relating to OSTEOPATHY than in any other medical dictionary on the market.

Then in addition you get tables of arteries, veins, muscles, nerves, arranged in tabular form, with PICTURES IN COLORS on the facing pages. You get signs and symptoms, treatments, serums, operations—such a wealth of collateral information that the AMERICAN ILLUSTRATED is really a MEDICAL ENCYCLOPEDIA.

Octavo of 1107 pages, with 331 illustrations. "119" in colors. Flexible leather, \$4.50 net; thumb index, \$5.00 net.

W. B. SANDERS COMPANY, Philadelphia and London

American School of Osteopathy

KIRKSVILLE, MISSOURI.

* * *

The Largest and Foremost Osteopathic College in the World.

* * *

DR. A. T. STILL, Founder of the Science,
PRESIDENT

* * *

C. E. STILL, D. O., Vice-President

G. A. STILL, M. S., D. O., Surgeon in Chief

GEO. M. LAUGHLIN, M. S. D., D. O., Dean

E. C. BROTT, Secretary-Treasurer.

* * *

THE NEXT CLASS WILL START MONDAY, FEBRUARY

2nd, 1914

The Journal of Osteopathy

Edited by M. A. Boyes, A. B., D. O.

LOCAL EDITORS

FIELD EDITORS

G. M. Laughlin, M. S. D., D. O., Clinic Dept. A. G. Hildreth, D. O.,.....Legislation
Geo. A. Still, M.S., M.D., D.O., Dept. of Surg. C. P. McConnell, M. D., D. O.,.....Practice
A. S. Hollis, A. B., D. O.,.....Staff Writer Frank Farmer, D. O.,.....Practice

Published monthly by the Journal of Osteopathy Publishing Co., Kirksville, Missouri.
Yearly subscription \$1.00 per year in advance; Canada \$1.10; Foreign \$1.25. Notice of
change of address should be accompanied by the old address, to prevent error in filing

SINGLE COPY 10c. - - - - - \$1.00 PER YEAR

Vol. XXI

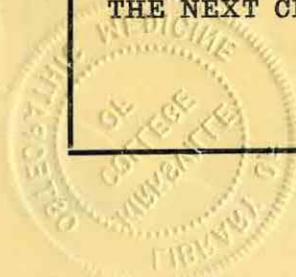
JANUARY, 1914

No. 1

CONTENTS OF THIS NUMBER

PROFESSIONAL CARDS.....	2
EDITORIALS—	
Contents of Journal of Osteopathy.....	7
Around the A. S. O.....	9
Miss Mary Jane Laughlin.....	10
W. J. Burns Visits A. S. O.....	11
Still-Hildreth Sanatorium.....	11
Washington State Board.....	12
Laughlin Attends Ohio Meeting.....	13
OSTEOPATHIC TECHNIQUE.....	14
RADIUM AND CANCER.....	25
CHRISTMAS DAY AT A. S. O. HOSPITAL.....	27
YOUNG DOCTORS WITNESS FIRST SURGICAL CASE.....	28
CASE REPORT.....	30
OSTEOPATHY AND CLAUDE BERNARD'S EXPERIMENT.....	32
PELVIC ATONY.....	35
HOSPITAL NOTES.....	39
BOOK REVIEWS.....	42
NOTICE OF STATE BOARD EXAMINATIONS.....	46
PERSONALS.....	47
ASSOCIATIONS.....	50
BUSINESS OPPORTUNITIES.....	54
LOCATIONS AND REMOVALS.....	58
MARRIED, BORN, DIED.....	58

Entered at the Post Office at Kirksville, Missouri, as Second Class Matter



591.97

Professional Cards

The Osteopath Physicians whose cards appear in the columns of this Journal are endorsed by the American School of Osteopathy as qualified practitioners.

CALIFORNIA.

DR. A. C. MOORE, Osteopathic Sanatorium,
1121-1123 Devisadero St., San Francisco.

Treatment at your home if desired. Phone West 2071 for appointment.
Terms on application for Treatment, Room and Board

WILLIAM HORACE IVIE, B. S. D., D. O.

Graduate and Post Graduate and formerly member of the A. S. O. Faculty
Office hours, 10 a. m.—6 p. m. Telephone: Berkeley 1183. Lady Attendant
501-510 First National Bank Bldg. Opposite San Francisco

BERKELEY, CALIFORNIA

Phones F. 5394. Main 4111

Hours 2:00 to 5:00

DR. ALICE B. CHAFFEE,

OSTEOPATHIC PHYSICIAN

Instructor in Osteopathic Technique,
Los Angeles College of Osteopathy.

Suite 418-25 Lissner Bldg.
524 S. Spring St.

LOS ANGELES, CALIFORNIA

**OSTEOPATHIC PHYSICIAN
AND OCULIST**

Residence 5606 Hollywood Blvd
Hollywood. Phone Hollywood 8

L. LUDLOW HAIGHT, Oph. D., D. O.

OFFICE

817-818 Wright and Callender Bldg.
4th and Hill Sts.

Phones: F 3836, Main 716

LOS ANGELES, CALIFORNIA

COLORADO.

DR. GEORGE W. PERRIN,

Phone Mair 4540.

516 Empire Building

DENVER, COLORADO

PROFESSIONAL CARDS

3

DR. CHAS. C. REID

535-538 Majestic Building

Hours 10 to 12, 2 to 4; by appointment after hours.

Telephone M. 3769.

DENVER, COLORADO.

DR. G. W. PAULY, B. S., D. O. DR. LEONA E. PAULY, B. S., D. O.

Telephone, York 3326

Graduates of the American School of Osteopathy, Kirksville, Missouri
Office, 201-202-203-204 De Graff Building, 118 N. Trejon St.,
Residence, 1211 N. Weber. Both phones.

COLORADO SPRINGS, COLORADO.

ILLINOIS.

DR. JOSEPH HENRY SULLIVAN

Office Established 1894

Goddard Building

27 East Monroe St. Cor. Wabash Ave.

DR. CHESTER L. MILLER

CHICAGO, ILLINOIS

MORRIS LYCHENHEIM, D. O.

OSTEOPATHIC PHYSICIAN.

Suite 162 The Mentor Building, Residence Office
161-63 State Street, Chicago 2030 Kenilworth Ave., Rogers Park, Chicago
Phone Central 1475 Phone, Rogers Park 4341

DR. CARL P. McCONNELL

14 West Washington Street.

DR. FRANK C. FARMER

CHICAGO, ILLINOIS.

DR. GRACE LEONE SMITH

Suite 1201 The Goddard Building,

27 East Monroe Street.

CHICAGO, ILLINOIS.

MASSACHUSETTS.**HOWARD T. CRAWFORD, D. O.**

OSTEOPATHIC PHYSICIAN.

The Gill Building, 673 Boylston St., Telephone Back Bay 382.

Dean of the Massachusetts College of Osteopathy.

Fifteenth year of Practice.

BOSTON, MASSACHUSETTS.**R. KENDRICK SMITH, D. O.**

OSTEOPATH

REGISTERED PHYSICIAN

ORTHOPEDIC SURGEON

Hospital Accomodations.

Arlington Street, 15

BOSTON, MASSACHUSETTS.**MISSOURI.****DR. HERMAN F. GOETZ,**

756 and 757 Century Building

ST. LOUIS, MISSOURI.**W. H. ECKERT, D. O., M. D.**

OSTEOPATHIC PHYSICIAN AND SURGEON

Office hours 9 to 4.

706-7-8-9 Century Bldg., 313 North 9th Street.

Phones { Olive 1982.
Central 4320.**ST. LOUIS, MISSOURI****NEW YORK.****WALTER W. STEELE, D. O.****HARRY M. HARRIS, D. O.**

Osteopathic Physicians.

Graduate American School of Osteopathy.

Established 1896

60 Delaware Ave., Cor. Allen Street

Branch Office—45 Pine Street, LOCKPORT, N. Y.

Hours: 9-12 a. m. and 1-4 p. m. Except Wednesdays and Saturdays, 9-12 a. m.

BUFFALO, NEW YORK.**NEW YORK CITY.****GUY WENDELL BURNS, M. D., D. O.**Phones: { 575 } Plaza
 { 5418 }

49 West 57th Street.

NEW YORK CITY.**MRS. CORNELIA A. WALKER,**

HOTEL MARTINIQUE, Broadway, 32nd and 33rd Street

Phone, 8000 Madison

NEW YORK CITY**DR. RICHARD WANLESS,**

THE SWANNANOA

Telephone 120 Stuyvesant

105 East 15th Street.

NEW YORK CITY.**DR. CHARLES HAZZARD,**

Astor Court Building, 18 West 34th Street.

NEW YORK CITY.**OREGON.****LUTHER H. HOWLAND, D. O.,**

New Selling Building, Sixth and Adler.

Phones, Main 2213, F. 2229

Residence, E. 3789.

PORTLAND, OREGON.**PENNSYLVANIA.****FRANK L. GOEHRING, D. O.**

Nixon Theatre Building.

PITTSBURGH, PENNSYLVANIA.

DR. GEORGE WASHINGTON MOORE,

Graduate American School of Osteopathy
 Post Graduate Philadelphia College of Osteopathy
 1233 Real Estate Trust Building, Broad and Chestnut Streets.
PHILADELPHIA, PENNSYLVANIA.

Residence office, Woodbury, New Jersey.

DR. PASCHALL MORRIS

Graduate of the American School of Osteopathy, Kirksville Mo.
 Flanders Building, 15th and Walnut Sts.
PHILADELPHIA, PA.

DR. GENE G. BANKER

Announces the Reopening of Her City Office
 At a New Address

ROOM 909, THE FLANDERS
 S. E. Corner Fifteenth and Walnut Streets
PHILADELPHIA

Bell Telephone,
 Spruce 3617.

Hours:
 10 A. M. to 1 P. M.

WEST VIRGINIA.**J. D. MILLER,**

OSTEOPATHIC PHYSICIAN
 Graduate of American School of Osteopathy
 87 Beechurst Avenue
MORGANTOWN, WEST VIRGINIA.

FOREIGN.**DR. ASA WALMSLEY,**

Graduate and Post-Graduate under the Founder of Osteopathy
PETERBOROUGH, ONTARIO, CANADA.

DR. STANLEY M. HALEY,

OSTEOPATHIC PHYSICIAN
 Graduate of A. S. O.
 Office Cruz Street, No. 6.
SAN JUAN, PORTO RICO.

The Journal of Osteopathy

Edited by M. A. Boyes, A. B., D. O.

Vol. XXI

JANUARY, 1914

No. 1

Contents of the Journal of Osteopathy. Last October we announced that the Journal of Osteopathy would contain during the year a series of articles on Osteopathic Technique by Dr. A. S. Hollis and a series on Congenital Dislocation of the Hip and the Abbott Operation by Dr. George Laughlin, as well as articles by other leading osteopaths. We are much pleased to note the growing circulation of the Journal of Osteopathy, a proof that the articles now appearing meet with the appreciation of the profession. In November we sent out about 1500 sample Journals and circulation letters with the result that during the month of December the circulation of the Journal was increased about 300. This we trust is just the beginning of a really great Journal of Osteopathy. Here is a partial announcement for the year 1914:

Dr. Hollis's articles will continue for several months; perhaps until August or until he finishes his series of articles on "Osteopathic Technique." Many letters have been received from members of the profession saying that these articles contain the best statement of the application of osteopathic principles yet given.

In February or March Dr. George Laughlin will contribute his first article to the Journal in 1914. Everybody who knows anything about Osteopathy knows Dr. George Laughlin; but not everyone knows what he is doing. The newspapers of the country are telling how he travels to different states, performs wonderful bloodless operations, gives lectures, etc. and one would think that was all he did. Far from it. With rare exceptions he lectures five times a week to over two hundred senior students of the American School of Osteopathy; he is medical director of the American National Assurance Company, one of the most prosperous young insurance companies in existence; he is Dean of the American School of Osteopathy and he is Dean, too; he is the man the osteopathic

profession tried to get to write a Practice of Osteopathy. Now this is the man who is writing for the Journal well illustrated articles on the Abbott Operation and Congenitally Dislocated Hip.

Dr. George Still, the osteopathic surgeon will contribute regularly to the Journal. Perhaps we are not telling as much about his skill in operating as we should because there is so much operating at the hospital that it has ceased to cause comment around the A. S. O. And right here I want to take occasion to say that Dr. Still does not operate on all the cases that come to the A. S. O. Hospital not by a large number. The past week, to the Editor's personal knowledge, three cases for operations from as many different states were not operated upon. Two were sent home being told they did not need an operation. The third is still at the hospital awaiting the further development of the case. So just remember that you will get an honest opinion from Dr. George Still. Watch for his articles on Bandaging, Plaster Casts, Osteopathic Manipulations in Surgical Cases, etc.

Dr. Frank Bigsby, who has the largest obstetrical practice in the history of the American School of Osteopathy, is collecting some excellent data upon the results of manipulations before and after parturition.

We believe we can say without fear of contradiction that the ORIGINAL WORK being done at the American School of Osteopathy is bearing greater results than in any other college teaching the art of healing. When you take your vacation come to Kirksville and see what is being done. Remember, however, you can't see it all in a day; neither can you see it all in a month, but come and see what you can in the time you have. Whether you can come or not remember you can get a record of all this work by reading The Journal of Osteopathy.

Other prominent osteopathic physicians will contribute excellent articles during the year. Drs. Millard, Waggoner, Ella Still, Hildreth, Teall, etc. Watch the Journal and see what progress is being made in the osteopathic profession.

Around the A. S. O.

It is wonderful the great things that are transpiring every day at the American School of Osteopathy. Since school opened January 1 (this is written Jan. 8) the Editor has taken advantage of the opportunity to see what is going on. It would be impossible to tell all we saw but here are a few things that attracted our attention.

At the hospital there isn't a vacant room; and we were informed that the applications received for vacancies will keep the hospital filled for some time to come. Quite a number of operations, abdominal, appendiceal, ovariectomy, suspensions, hysterectomy, etc., have been performed by Dr. George Still. The Abbott operation has been decidedly in evidence. Dr. George Laughlin has removed three casts. In addition to this he has set one congenitally dislocated hip. The seniors have repeatedly been called to the hospital to observe Dr. Frank Bigsby's technique in obstetrics. The gynecological laboratory, under the direction of Dr. Ella Still, is doing excellent work. The work is superior to any similar work we have observed in Rush Medical. One thing deserving of particular mention was the osteopathic viewpoint from which she presented her work. Practitioners visiting the A. S. O. should avail themselves of the opportunity to observe not only what may be done along this line of work but also to see what is actually being done, and to see the osteopathic principles used in doing it. This work was being demonstrated to a small group of students; in fact it is the rule now at the A. S. O. to give every student individual attention in every department. In the November issue of the Journal may be seen a cut of such a group in plaster cast work. We also visited the treating rooms. The person who said that manipulations are not properly taught at the A. S. O. is in error. At least it looks that way to us. We wish you could have seen what we saw. Pure Osteopathy; searching the spine for lesions; showing the students how to find a lesion and telling him why a certain manipulation was used; and all of this in a personal, matter-of-fact, teachable way. When you come to Kirksville go down the hall when the "manips" are on and be convinced. We visited other departments and saw many other things of much importance and we are now more than ever impressed with the greatness of the American School of Osteopathy and the army soon to go forth to uphold the banner of Osteopathy.

Miss Mary Jane Laughlin

Born January 17, 1914

Mary Jane Laughlin, a beautiful little eight and one-half pound girl, arrived Saturday morning at the home of Dr. and Mrs. Geo. M. Laughlin. Although its proud parents have been wedded fourteen years, this is the first and only child.

On account of this and because the father of the little girl is dean of the A. S. O. and her mother the daughter of the founder of Osteopathy, the students broke classes Monday morning and duly and properly celebrated the important event.

Immediately after school was dismissed the "boys" of the school put Dr. Laughlin, the proud papa, and as many of the other members of the faculty as they could conveniently find, into a buggy and formed a parade, headed by the A. S. O. band, marched around the square and some of the other principal streets of the town. The buggy bore a placard on which was printed the significant word "Father," so that those who ran might read and understand.

Later Dr. Laughlin passed out the cigars to the male contingent of the school, and in the afternoon served ice cream and cake to the ladies at the school building.

Dr. Laughlin and his wife are justly proud over the arrival of their little heir and members of the profession everywhere will rejoice with them.

W. J. Burns
Visits
A. S. O.

We have recently had the pleasure of a visit from W. J. Burns, the world's most famous detective and criminologist.

The thing that interested us most in Mr. Burns was not his world wide reputation as a detective, but that he is intensely interested in Osteopathy, and he stated that he wished he had the time to spend a few months here and attend lectures as he knew they would be valuable to him in his work.

Mr. Burns is a man who believes in being up to date in everything. He has over two thousand men in his agency, among them expert physicians, chemists and lawyers; men of world wide reputation in their lines, and men he can at any time call on for expert advice. He certainly is a live wire and his work is most interesting. His effort on behalf of civic improvement and his cleaning up the graft in Philadelphia, San Francisco and Detroit, are now matters of history. These cases and his work in ferreting out the evidence and securing the conviction of the McNamaras have probably added most to his fame.

Mr. Burns is a polished gentleman and fluent talker and entertainer. I dare say his equal has never visited Kirksville. He kept his audience deeply interested for two hours and not for a moment during the lecture did the interest flag.

The Still-Hildreth
Sanatorium

Every day brings nearer the opening of the Still-Hildreth Sanatorium located at Macon, Mo. Dr. A. G. Hildreth, president of the institution, is now at Macon arranging for the opening, March 1. All letters to Dr. Hildreth should now be addressed to Macon, Mo. These letters, if they are to secure rooms for patients, should be written at once because every indication points to a capacity opening. Dr. Hildreth is delighted with the enthusiastic support and encouragement being given by the profession. For the benefit of our new subscribers we will say that the Still-Hildreth Sanatorium is owned and controlled by osteopaths and will handle all classes of nervous diseases osteopathically. The following statement, which will carry conviction to every osteopath, is taken from the prospectus of the sanatorium: "The success of osteopathy in handling the various forms of dementia and nervous troubles under circumstances and surroundings such as we have been forced to use makes us feel that the proper environment, the right kind of foods, a proper system of

exercise, coupled with **specific osteopathic treatment** will produce cures in hundreds of cases now pronounced incurable." Should the sanatorium be able to do to several cases of dementia what a few osteopaths have done in certain individual cases of dementia it is impossible to calculate its great good upon humanity and the osteopathic profession. One page 66 of this Journal will be found the announcement of the Still-Hildreth Sanatorium.

**Washington State
Board of Medical
Examiners.**

On November 15, 1913 Governor Lister of the State of Washington appointed an entirely new State Board of Medical Examiners. The board is composed of nine members of whom two are homeopaths, two are osteopaths, and five are allopaths. The osteopathic members are J. L. Walker, D. O., Sunnyside, Wash., and J. E. Hodgson, D. O., Spokane, Wash. The first



DR. J. L. WALKER,
Sunnyside, Wash.

meeting of the board was held at North Yakima, Commercial Hotel, for the purpose of organization, to select the place for holding the next examination and to transact any other business that may come before the board. At this meeting Dr. J. L. Walker was elected vice president. The meeting was a harmonious one, all the members being in full accord as to conducting the business of the board in such a manner that every applicant should have a fair and square examination, irrespective of the school of healing from which the applicant comes, and to eliminate any cause for the feeling of unfair and unjust treatment that in the past applicants for examination may have entertained. It was agreed that all questions on each subject should be submitted to the whole board the night before examination and be approved or rejected, and that other questions be substituted if so recommended by a majority of the board. Also, in the event of any applicant failing on any subject

by a few points only, that applicant's paper is to be submitted to the entire board for examination before the applicant be disqualified for a license. This will prevent the possibility of any one member submitting catch questions, or having the power to disqualify any applicant without the approval of the entire board. The January examinations were held in Spokane January 6 to 10. There is plenty of room in Washington for good live osteopaths. Every applicant will be accorded a fair examination.

**Dr. Geo. Laughlin
Attends Meeting
Ohio Osteopathic
Society.**

The Ohio State Journal of Columbus, Ohio gives the following account of Dr. George Laughlin's work before the society December 31, 1913. "In the astonishing time of just eight minutes, Dr. George M. Laughlin of Kirksville, Mo., yesterday performed an operation to reduce congenital hip dislocation on Mary Alberta Wollard of Newark, a girl of five years. This is the operation which Dr. Lorenz and those who practice his system usually require from an hour to an hour and a half to perform."

"The work was done in public demonstration at the Chittenden Hotel, before the Ohio Osteopathic Society now in session there. Dr. Laughlin comes here direct from the leading school of practitioners and he had his training under its founder. Among his associates Dr. Laughlin is regarded as the greatest osteopathic surgeon in America."

Girl Must Wear Cast.

"Immediately following the operation the girl was placed in a plaster cast, which she will wear for several months. A second cast will then be put on and if the case works successfully, by the end of an equal period, the child should be well and strong. In conjunction with this demonstration the cast was taken from the body of a Cleveland boy, who had been operated on last summer. This case had been held for the purpose of demonstration. Both joints were found to be in perfect condition."

OSTEOPATHIC TECHNIQUE

By ARTHUR S. HOLLIS, A. B., D. O.
 Professor of Principles at the A. S. O.
 (Continued from December Issue)

THE DORSAL REGION.

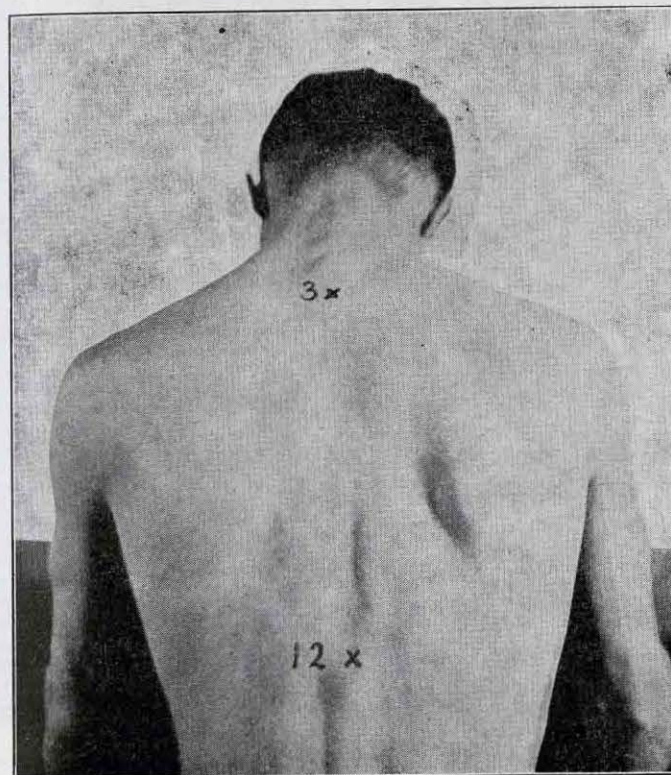
2. The Middle and Lower Dorsal Vertebrae.

Diagnosis

In this region as in the upper dorsal region the most trustworthy diagnosis is obtained by testing for the movement between the vertebrae, both collectively and individually. From the collective standpoint a very interesting and instructive point may be noted when several vertebrae are affected on one side, and from its extreme obviousness it may be of value to persuade a patient or a patient's friend that the spinal method of treatment at least has a basis in actual fact. Let the patient be seated on the table in a relaxed manner with folded arms and with back to operator. Let operator place hands on patient's shoulders and lightly turn him in a rotary manner from side to side, noting carefully the amount of force required to twist him in this way. Quite frequently it will be found that, using the same amount of force on either side patient will rotate considerably further on one side than on the other. This difference is visibly noticeable and shows clearly that OSTEOPATHIC LESIONS MANIFEST THEMSELVES AS PERVERSIONS OF MOVEMENT; that is to say, their pathology is such as TO LIMIT THE NORMAL RANGE OF MOTION in the region involved.

Again from this same standpoint of collective involvement several vertebrae may be "anterior," that is to say, the spine may be straighter than is normal—the ordinary dorsal curve being partially obliterated—, or again several vertebrae may be slightly twisted. We will therefore consider the diagnosis of each of these conditions. When a spine is anterior, the condition is very easily palpable, as the dorsal convexity is largely absent and the spinous processes are more closely approximated than is usual, even for this region; also when patient bends head forward, the convexity is but very slightly improved as the spine is essentially more or less straight. Often only three or four vertebrae seem to be affected in this way and this condition is spoken of as an "anterior upper dorsal, or an "anterior middle dorsal," etc; sometimes the entire dorsal region is affected. See cut.

The rotary twist of the vertebrae is best diagnosed by noting the prominence of the angles of the ribs on one side or the other. Thus patient is seated on stool, with arms hanging between knees and with head and back well flexed; operator now stands in front of patient and looks down his back. In this way even the slightest prominence of the ribs is markedly exaggerated and very frequently the ribs on one side will be considerably elevated above



Cut showing a bad "anterior dorsal" spine. In this case the convexity of the dorsal region is almost entirely obliterated, the spine being quite straight from the third to the twelfth dorsal vertebrae.

the ribs on the other. Such a condition can of course only be caused by a twisting of the vertebrae around a vertical axis. See Figs. I. and II.

It is possible for an anterior dorsal to be produced in association with the collective rotary twist that we have described. That

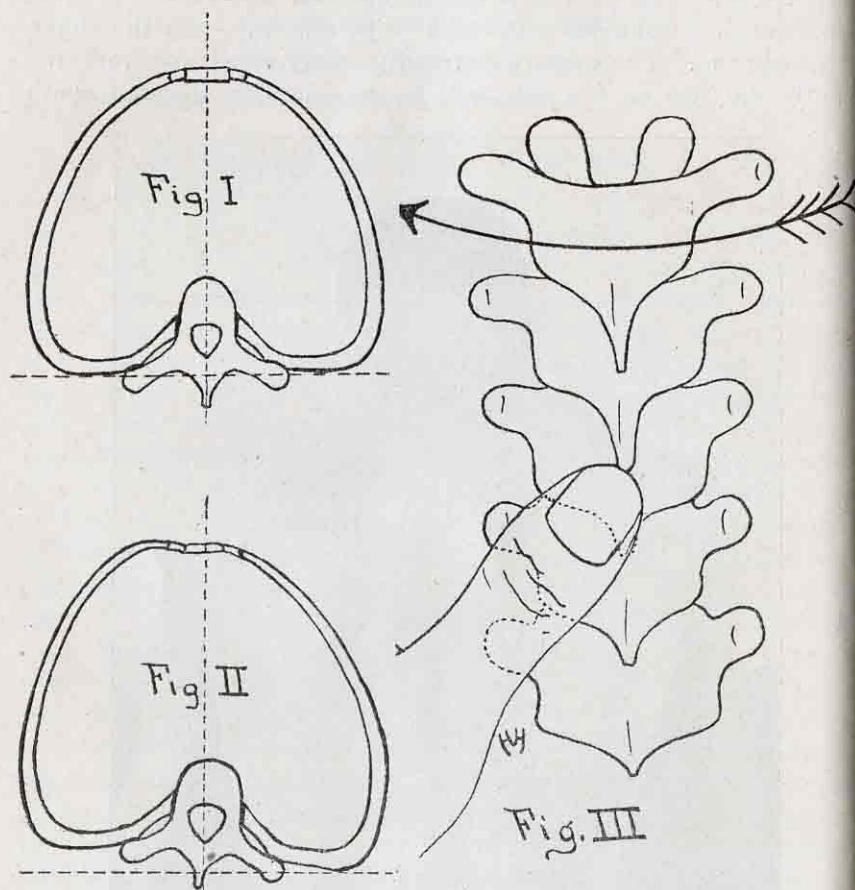
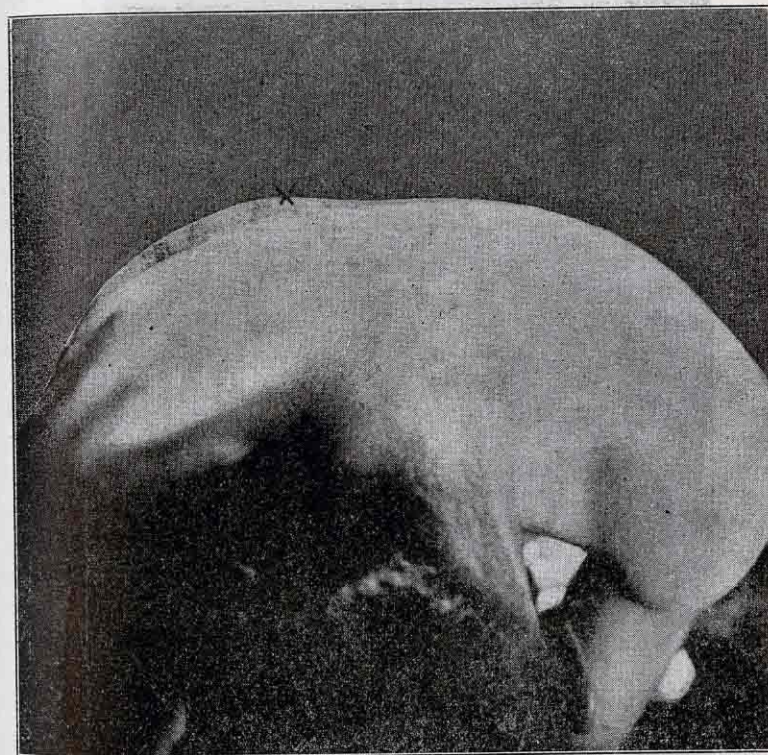


Fig. I. Diagram showing a normal dorsal vertebrae with attached ribs

Fig. II. Diagram showing the prominence of the ribs produced by the rotary twist of the vertebrae.

Fig. III. Diagram showing the principle used in testing for the movement between individual vertebrae, and also in directly establishing such movement.

is to say, as the vertebrae twist in the manner suggested they may sink in slightly as a consequence. When, therefore, an anterior dorsal is to be corrected it is well to note carefully whether or not there is any prominence of the ribs on one side, because if there is, the rotary twist thus demonstrated is partly responsible for the anterior condition of the vertebrae in question. We suggest this

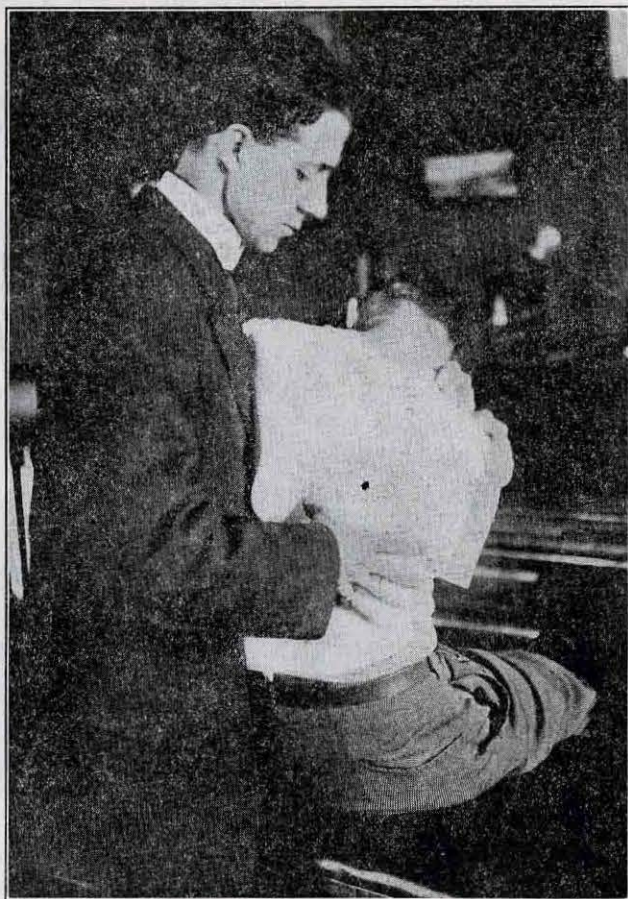


Cut showing a slight bulging of the ribs at the cross. It is very difficult to obtain a good picture of this condition though it is frequently present. It will be noticed that the one side is fuller than the other, however.

simply as a point worthy, in certain cases, of consideration.

As to lesions between individual vertebrae, these should always be carefully tested for. They are often secondary to the collective involvements such as we have already noted, or again they may be compensatory to lesions below. They are, however, also frequently present as primary conditions, needing individual attention.

Lesions in this region can be determined as exactly as in the upper dorsal region and by a similar type of manipulation. A variety of methods can be used to obtain a suitable leverage, and the following is simply suggested as a good one. Patient sits with arms across chest and hands on shoulders; operator, standing behind



Cut showing method of testing for the movement between individual vertebrae in the middle and lower dorsal regions. This type of manipulation is of great value also in treating in these regions.

patient, grasps his further arm or shoulder. Operator then places thumb of other hand between spinous processes and lightly teeters the body. If this is done correctly no great force is required and

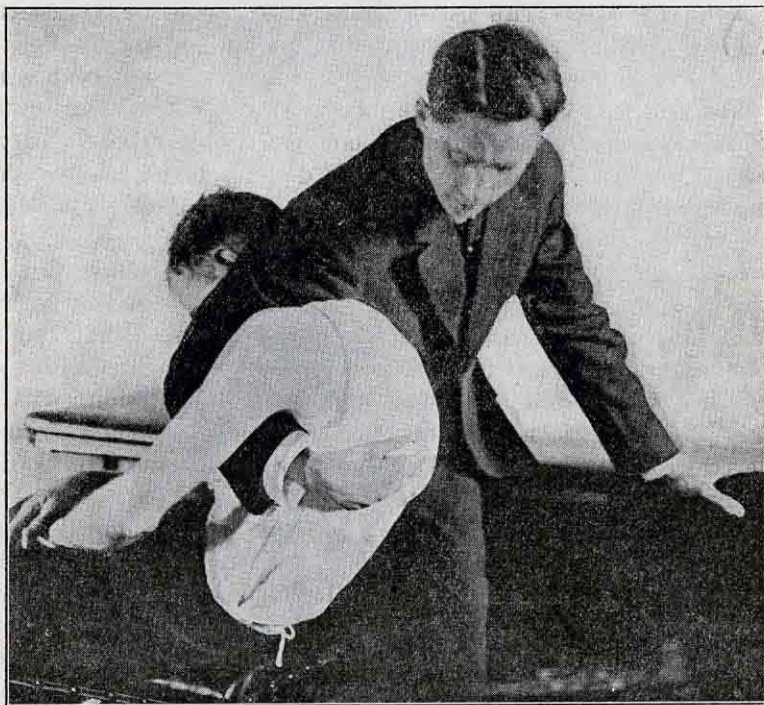
the movement between individual vertebrae can be easily felt for diagnostic purpose. The principle involved herein is illustrated in Fig. III. A little practice is all that is required. Remember, individual lesions in the dorsal region—whether slight rotations or merely rigid approximations—can all be thought of from the standpoint of the essential principle underlying them. As we have urged before THIS PRINCIPLE IS, THAT THE PATHOLOGY OF A LESION IS OF SUCH A NATURE THAT THE LESION MANIFESTS ITSELF IN A LESSENERED DEGREE OF MOVEMENT WITHIN THE FULL RANGE OF MOTION OF THE ARTICULATION, AND THE CORRECTION OF THE LESION IS OBTAINED WHEN AND ONLY WHEN THE FULL DEGREE OF NORMAL MOVEMENT IS RESTORED THEREIN. We might here mention one more point that is of importance from the standpoint of both diagnosis and, as we shall see later, of treatment; it is, that often when there is a slight rotary twist of several vertebrae, compensated for by a twist below of several other vertebrae in the opposite direction, an obstinate "individual" lesion will apparently be present at the point of juncture of the two twists. It is obvious that, unless the collective rotary twists be recognized, neither specific nor general work, directed to "set" this individual lesion, will be successful, as the lesion itself is, as it were, secondary entirely to the two rotary twists and the lesion will persist until the rotary twists be recognised and corrected.

Summing up the lesions to be looked for in the dorsal region we would suggest the following classification. Such lesion may be: (a) collective; (b) individual. If collective we find: (1) the normal convexity more or less obliterated; (2) a rotary twist of several vertebrae, frequently associated with a compensatory twist in the opposite direction either above or below. If individual we find rigidity manifesting in very slight rotations or in supero-inferior approximations, etc; further, individual lesions are frequently secondary to the rotary twists above mentioned or even to other lesions of the innominate or lumbar vertebrae.

Treatment

Before describing methods of treating lesions in the lower and middle dorsal regions we wish again to impress upon our readers the fact that we are not attempting in these articles to describe dogmatically the only methods of "setting lesions," or in other words, of normalizing the spine. We urge again that the PRINCIPLES

underlying spinal therapy are ABSOLUTE, being built upon anatomical and physiological facts, and in these articles we are attempting to show along what lines involvements of the vertebrae may be found—no matter by what names such involvements are called—and also to show the principles utilised in the correction of spinal abnormalities. In any discussion, therefore, dealing with the correction of



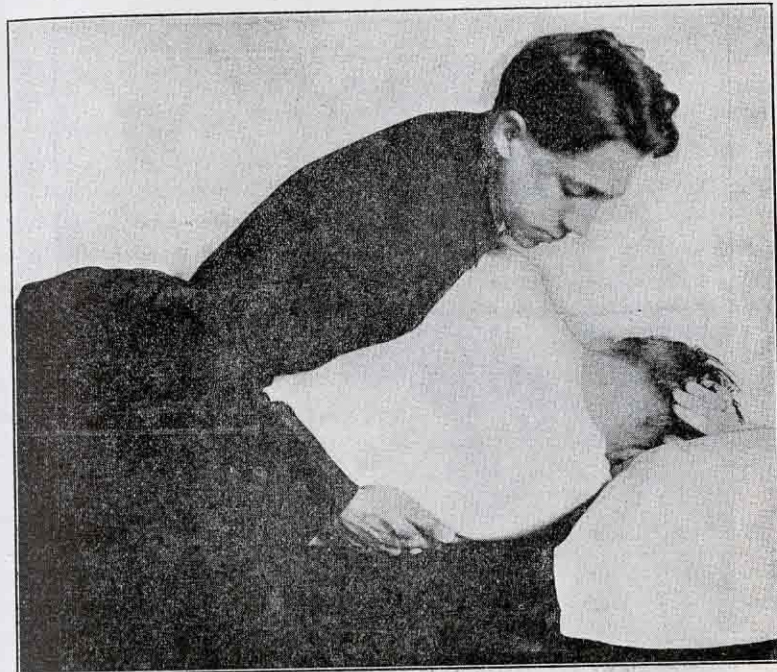
Cut showing an excellent method of re-establishing the normal dorsal convexity in an "anterior dorsal" spine.

trouble in the region we are here considering, the best we can do is to suggest the lines that may be used in obtaining results osteopathically and then to trust that the individual mechanical skill of the operator may enable him to apply more specifically in actual cases the principles thus suggested.

A. Correction of an Anterior Dorsal Region.

Under this heading we would suggest two methods, as follows: Place the stool about 12 inches from side of table and let patient

sit upon it with his side to edge of table; let operator, standing between patient and table and facing opposite way to patient, place his axilla over the base of patient's neck so that his forearm will pass under patient's axilla while his hand will more or less support patient's back. Operator can now take a step forward so as to throw patient back and off his balance. It is well for operator to



cut showing a second method of treating an "anterior dorsal" spine. Operator's hands are clasped beneath ribs and while patient takes full breath pressure is applied by operator's chest above. The principle of above manipulation can readily be understood.

balance himself with his other hand on treating table. From this position operator can exert a steady pressure upon the dorsal spine so as to bow it to any extent desired. It is well always to use this manipulation on both sides of patient, as otherwise there is a possibility of straining the back somewhat unduly on one side.

The other method we would suggest is as follows: Let patient lie on side on table with head well flexed so as to put some tension on the supra-spinous ligaments. Let operator sit on table in

front of patient's body with his hands clasped under patient's ribs. Now let him put his chest on near ribs and instruct patient to fill up his lungs fairly full. As patient does this, operator compresses patient's chest laterally and rocks him slightly back and forth. This pressure should not be continued during expiration of patient



Cut showing a method of taking out a rotary twist from several vertebrae by employing the lever of the prominent ribs. It is well to follow such a manipulation by a traction of the entire spine.

and, as in the previous manipulation, the operator should work from both sides, that is to say, with patient first on one side and then on the other, to avoid any possibility of straining one side more than the other. The pressure can be employed to advantage five or six times on each side. The manipulation we have just suggested

is of great value for the condition specified and in many cases also of poor nutrition it will be found very helpful.

B. Correction of a Rotary Twist.

A rotary twist is best taken out of the spine by first utilising the long lever presented in the prominent ribs, and by then employing traction in some way upon the spine as a whole. The accompanying diagram (Fig. II.) well shows the principle employed in this first step suggested. For the second step a mechanical table offers the most easy method of getting good traction with but little effort on the operator's part. We would here simply mention the fact that those lateral curvatures that are amenable to osteopathic treatments will respond to the application of the principle we have outlined above, namely, a pulling forward on the prominent ribs, with perhaps some little pressure on the spinous processes TOWARDS the prominent ribs, to be followed by a traction of the entire spine. Also, when a rotary twist is compensated for by a second one as is often the case, best results are obtained by working first upon the primary twist, then upon the secondary, and finally again upon the primary one. In this way the maximum degree of "untwisting" can be procured, and the result obtained at each treatment will be found to be more or less permanent.

The lesion, whose correction we have described above, is one that is very frequently present though it is also quite often overlooked. We would urge therefore the importance of examining for prominent ribs with the patient seated upon a stool and flexed well forward. Remember such a prominence—when found—can only be caused by a rotary twist such as we have described. Remember too, that when found in association with an anterior dorsal, this latter condition is possibly secondary to the rotary twist, in which case it will respond satisfactorily only when treated from this standpoint, in association with other methods. Also remember that "individual" lesions are frequently present at the juncture of two such rotary twists and will be found persistently to resist treatment until the primary conditions producing them are corrected.

C. Correction of Individual Lesions.

In association with the special methods we have suggested it is generally necessary to employ methods designed to free up the individual articulations. Separation of the articulations is of value

in many cases. A series of pops is thereby produced and every osteopathic physician knows manipulations that will produce the desired result in this region. Such a manipulation is best followed by one designed to obtain actual movement—along the plane of the articulation between the involved vertebrae. There are many well known manipulations that obtain separation, as for example when the patient lies prone and the operator places one hand on either side of the spinous processes, takes out the "slack" from the spring of the spine, and then delivers a "thrust" towards the table. This is of value if used with care and not too roughly. Other operators place the knees in the back with the patient sitting on stool and clasp their hands in front of patient's chest. Indeed every operator has his own method of obtaining separation in this location.

The best method of obtaining movement in the dorsal spine is by an amplification of the principle suggested for the diagnosis of lesions, and we would outline the following technique as being of value. We specify 'left' and 'right' for clearness only, and the manipulation is of as great power exactly reversed, and should of course be used on both sides. Let patient sit on table with arms crossed over chest, as before suggested, and with hands placed on lateral base of neck. Let operator grasp patient's left elbow on left shoulder with his right hand and rotate the spine from the lever thus obtained, at the same time opposing the rotation, segment by segment, by his left thumb placed between spinous processes on the left side. Fig. 1 will make clear the principle utilised and the cut reproduced on this page will show the manipulation in actual use. This is a very powerful movement, though, no doubt, there are levers that in other operator's hands are as powerful as the one suggested or even more so.

Remember if not mechanically inclined an osteopath will never be more than a mere imitator, slavishly copying some one else's moves, and if mechanically inclined, provided the principle be thoroughly grasped, the method will suggest itself. It is our endeavor in these articles to write for the mechanically inclined osteopath and we are therefore attempting above everything else to state clearly WHAT IS TO BE LOOKED FOR and we trust that the operator himself will have sufficient ingenuity to correct trouble if he understands exactly of what nature that trouble partakes.

(Continued in February Issue of Journal)

WILL RADIUM BE THE SOLUTION OF CANCER PROBLEMS

A few months ago at a meeting of leading medical men from all over the country held at Philadelphia there was presented to the society a most amazing collection of testimony regarding the successful treatment of cancer by means of radium.

In spite of the apparent certainty of the evidence it would have attracted very little attention had it not been that the men presenting the proofs have attained reputations as scientists, that are not only national, but international, and neither of them have ever been connected with any sensational exploitation.

One of the men was Dr. Abbe, of New York City, and the other was Dr. Howard A. Kelly, of Baltimore, Maryland. Dr. Kelly has been professor of gynecological surgery in the Johns Hopkins medical college for the past twenty-four years, being there associated with such men as Osler. Dr. Kelly is also the author of many texts on surgery, including a large two volume text on gynecological surgery, which is accepted as standard the world over.

At the clinical congress of surgeons recently held at Chicago, a large mass of evidence regarding the radium treatment of cancer was presented at a special meeting held to consider this subject.

While the evidence was very encouraging in many cases, the committee appointed to investigate the matter, reported that, for the present at least, it was still advisable to operate in all such cases as could be reached by such operations, while those cases that had gone beyond the operative stage or were so located that they could not be reached by operations due to structures involved would find much encouragement in the treatment by radium.

At this meeting were two well known European surgeons who presented extensive experiences in the Continental hospitals, particularly in Bayreuth, Freiburg, Koeln and Berlin. The extremely wide spread geographical distribution of the sources of information and the undoubted authenticity of very many of the reports, makes even the most skeptical pause to consider, and even those who have watched many supposed cancer cures come and go are beginning to wonder if this will not prove at last to be the long prayed for deliverance from this dread condition.

The World Supply of Radium.

So much prominence has recently been given to the question that as has been noted in the press throughout the country, a bill has been introduced into congress looking toward government control of the known sources of radium supply in the country, and the withdrawal from entry, all government lands where it might possibly be found. This is suggested by reason of its extreme rarity, there being in existence at present only one seventh of one ounce of pure radium, and indeed this is only commercially pure; the only chemically pure specimen being held by the French government and consisting of one-third of one grain, which was prepared by M. and Mme Curie, the discoverers of radium, polonium and several other new elements possessing radio-active qualities.

The strength of this wonderful element is illustrated by the fact that M. Curie carried to his grave a terrible scar on his side due to a burn produced by carrying the above mentioned specimen of radium, enclosed in a sealed tube, in his vest pocket for several days. The ulcer produced by the burn was so severe that physicians for a long time despaired of ever healing it.

A. S. O. Hospital Interested.

It being known that Dr. George Still, surgeon in chief at the A. S. O. hospital, while in Europe last summer, had made a careful investigation of this, among other subjects, he was asked for his opinion regarding the value of radium as a treatment for cancer, and in reply stated to a reporter for the Morning News, that, while he was very much interested in the subject he was not as yet prepared to give a final opinion, although he stated that he was so much impressed with what he had learned about the matter both here and abroad that he was now in communication with a number of parties relative to securing a sufficient quantity of the substance for extensive experimentation at the A. S. O. hospital.

Dr. George Still receives Interesting and Encouraging Letter on Subject From Friend in Berlin, Germany.

Amongst the men with whom Dr. George Still is in communication are O. B. H. Wilmarth, a personal friend, who is the most extensive exporter of radium ore in America, there being no place in this country where it is refined. He is also corresponding with M. H. Tepe, of Paris, France, and H. I. Lauretsky, of Berlin, Germany. From the latter, who is not a dealer in

radium, but a brilliant scientist and a special writer for metropolitan dailies, Dr. Still has just received an extensive communication regarding the reports just issued from the Royal Charity Hospital, of Berlin, by the chief director, Geheimrath Professor Bohn.

Dr. Still further stated that he had never discussed radium very much, even in his surgical classes at the American School of Osteopathy, for the reason that he did not believe in building up false hopes on suppositions and yet on the other hand he had been impressed to such an extent by the things he had seen that he hesitated to criticize, and had therefore not discussed it either way.

It will be remembered that last summer when the so-called Friedmann cure for tuberculosis was creating so much comment, Dr. Still wrote from Berlin, the home of Dr. Friedmann, and in his letter, which was published in the Morning News, while he took the matter up scientifically, he did not hesitate to ridicule the treatment itself, although at that time it had reached the height of its popularity.

The fact that Dr. Still is so thoroughly impressed with radium as a possible cure for cancer is therefore of special significance when one considers the facts stated above. Dr. Still estimates that from \$3,000 to \$5,000 worth of radium would be required to carry on his experiments if matters he is now investigating are favorably answered.

If it proves of sufficient certainty, however, he is determined that the A. S. O. hospital shall have the first quantity of enough strength to be therapeutically valuable in this part of the world, no matter what the cost may be.

CHRISTMAS DAY AT THE A. S. O. HOSPITAL

In spite of the fact that the A. S. O. hospital was filled with patients to its capacity, and that the twenty-two nurses on duty were kept busy attending them, Christmas day was an exceptionally enjoyable one at that institution.

For days the express and parcel post packages with Xmas cards and greetings to both patients and nurses had been pouring in, until the immense fire-proof record vault was filled to overflowing.

On Christmas eve a regular Christmas tree celebration was held at the nurses' home at which time the presents were distributed to the nurses.

The presents for the patients were distributed on Christmas day and all the rooms and wards were made cheerful with cut flowers and ferns.

The patients who were convalescent enough to eat solid food were served a turkey dinner on the invalid tables at their bedsides.

A Christmas dinner was served to the nurses in the hospital dining room, which was decorated in an attractive manner for the occasion, and at each plate was an unique place card.

In addition to the scores of packages received from home folks every nurse was given a remembrance by each of the following: Miss Cora Gottreu, superintendent of the hospital; Miss Ruth Story, assistant superintendent; Dr. C. E. Still, Mr. E. C. Brott and Dr. George Still.

Numerous gifts were sent to the nurses from former patients, but the most surprising gifts were two substantial drafts sent to two of the nurses by an old prospector and miner from one of the western states, who was operated on last spring by Dr. George Still. While the nurses were ministering to him they little thought that he had either the ability or inclination to reward them, and his generosity was a striking and unexpected example of "bread cast upon the waters."

Christmas was an extended one at the hospital. The New Year is here and the packages keep arriving. One patient who was especially well remembered, remarked that he intended to be operated upon every year hereafter, just before Christmas.

SERIOUS OPERATION PROVES UNDOING OF YOUNG DOCTORS WITNESSING FIRST SURGICAL CASE.

Often times a bit of comedy helps to soften the tragedy of life and also it is often true that what is one person's tragedy is another's comedy. Both statements were well illustrated the other morning at the A. S. O. hospital where a large number of lower class students were attending a clinical operation which was an emergency case that could not wait until after the Xmas holidays when the members of the upper class could be present.

During the regular school term the surgical clinics are only attended by the senior students, but in this emergency those of the lower classes who are spending the holidays in Kirksville were also invited to witness the operation. Most of these students of course had never seen a serious operation before and this case was

OPERATION PROVES UNDOING OF YOUNG DOCTORS 29

a particularly complicated and serious one, being a case of locked bowels, due to a malignant growth of the gall bladder and large intestine, involving also the pancreas and liver. The gall bladder contained a quantity of pus and a large number of gall stones, each about the size of a hazel nut. The amphitheatre and pit, where clinical operations are performed, was kept at a high temperature as is necessary to prevent shock to the patient undergoing operation.

Sir Arthur Conan Doyle has written a clever little story of his medical school days in the Edinburgh hospital, entitled "His First Operation," in which the events were very similar to those of yesterday morning. The students were all seated in the amphitheatre surrounding the white enameled pit, when two white gowned, white capped nurses entered wheeling in the white dressing and instrument tables and the frames containing the bowls of antiseptics; then came the tall white rack with the glass vessels containing the normal salt solutions to be used in case of emergency. A white gowned interne followed, who read the history of the case soon to be operated upon. Reading was no sooner finished than the surgeon and the head surgical nurse also dressed entirely in white, entered from the sterilizing room and began putting on their rubber gloves, the surgeon meantime outlining the surgical findings of the case together with the proposed operation and the probable outcome. While he was still lecturing, the patient, already fully anaesthetized, was wheeled in on the operating table. The patient's face was entirely covered with the white anaesthetic mask and from head to foot white sterile blankets and sheets covered every part of the patient except a small square opening through which showed the part of the right side just below the ribs. The surgeon selected an operating knife, tested its edge on his glove and started the incision. As the thin stream of blood began flowing over the white skin and every eye was riveted on the enlarging wound, a gasp was heard and, as the artery forceps were being applied to the little blood vessels two more sickly gasps were heard and a survey of the audience showed that three people had no further interest in the case as they had fainted. As the muscles of the abdominal wall were separated and the contents exposed, three more lost interest in the operation, the last of these being a young man, who in falling, struck his head violently on the seat in front of him. At this Dr. George Still looked up from his operating and said,

"Don't mind those little things; some big man carry that fellow out," and as he was being assisted out, Dr. Still added, "Attending operations is like smoking cigars, so I am told; the first one will likely make you sick but if you keep on trying this is easily overcome. Any one can get used to operations by attending four or five."

As the operation proceeded and the abscess was opened, adhesions broken up and other necessary things accomplished four more students gave up the struggle with their first case and sought fresh air. As the last part of the operation, which consisted of the removal of no less than forty-nine gall stones, was being carried on the tally was completed by two more slipping out. In the meantime however, several of those who had fainted earlier gamely returned and witnessed the completion of the operation.

It is interesting to know that at this writing the patient is progressing to recovery.

CASE REPORT.

By DR. GRACE THOMPSON PHELPS and
DR. CHAS. A. BONE, Maryville, Missouri.

We present a very interesting case of fracture treated by a supposedly "learned" physician and surgeon of this place. Patient, male, nineteen (19) years of age had a complete transverse fracture of both bones of the lower leg in a motorcycle accident, September 6, 1913. He was at once taken to his home and Dr. _____ was called. He proceeded to care for the fracture by placing the lower leg in a well padded wire splint which was so short that the movements of neither the knee nor ankle joints were restricted. Over this splint he placed the bandage which was so loose that the patient complained of feeling the bones grate, and requested that the bandage be tightened. No extension was used, the patient being allowed to move about as he pleased. Sometimes in bed, sometimes in a chair with the knee flexed and foot on a pillow. Four days after the accident we were called to see the patient for what the attending physician had termed a sprained shoulder, saying it would be all right in a few days. The patient was suffering more from the shoulder than from the fracture and could not raise the elbow more than eight inches from the side. Upon examination by palpation we found the clavicle displaced backward upon the acromion pro-

cess of the scapula. Further examination by fluoroscope and portable coil confirmed our diagnosis. For this condition we were still treating him when the M. D. removed the splint. The patient immediately came to our office for examination. He said that upon removing the splint the doctor simply tapped with his fingers over the place of former injury and pronounced it O. K. Upon palpation we found a decided "jump-off" both going and coming on each side of the leg respectively, and a decided amount of motion in the union. We then took an X-Ray of the leg which is here produced. (See Figures I). The tibia was "over ridden" and articulat-

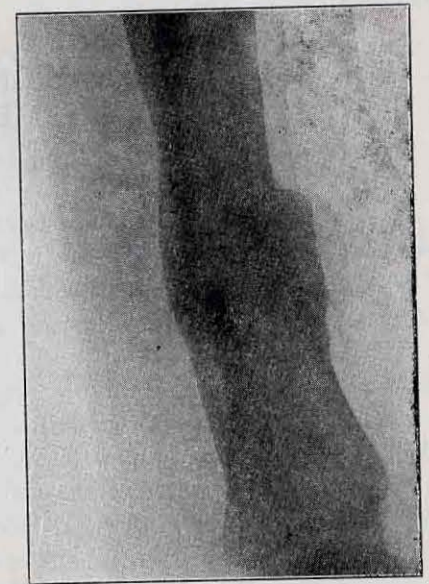


Fig. 1. Fracture of tibia and fibula. Fig. 2. Same case two months after 7 weeks treatment in wire splint open operation, and suturing bones and two weeks out, dismissed as "O. K." Shows no bony callus. in place, followed by extension and plaster cast. Shows fine bony callus.

ing by only about a quarter of an inch. The fibula was overlapped and attached to the tibia; indeed the upper end of the fibula was in the marrow cavity of the tibia. We took the patient to Kirksville where Dr. George Still corrected the condition by an open operation. (See Figure II). The patient this time being placed in a plaster-paris cast with extension and weight, remaining in the A. S. O. Hospital seven weeks. We feel that too much cannot be

said in favor of the X-Ray and its frequent use in the office of an osteopath. So many cases in which one is doubtful can be quickly determined by the use of the fluoroscope. This particular case has advertised us more than any one thing that we have ever done in this town. The patient being a genius along the lines of photography insisted on developing our plates and making the prints. He kept one for himself and was not the least bit bashful about showing them—even showing one to the M. D. who did the work. And yet how often the M. D.'s. are heard to say that the "osteopaths know nothing of modern methods of diagnosis." "They only treat nervous cases," etc.

THE OSTEOPATHIC SIGNIFICANCE OF CLAUDE BERNARD'S EXPERIMENT

By GEO. D. SCOTT

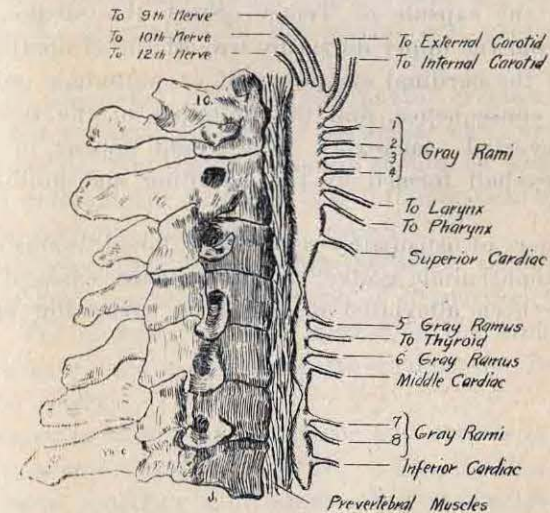
Fellow in Physiology, American School of Osteopathy

While performing Claude Bernard's experiment of cutting the cervical sympathetic in the cat, in the University of Chicago in 1912 I was struck by its great osteopathic significance, especially in cases of exophthalmic goiter and loss of accommodation to light.

The accompanying schematic drawing represents the cervical ganglia in the human subject. In the cat certain of the upper branches of the superior ganglion run in one trunk accompanying the vagus nerve and supply the following functions to the structures named: vaso constrictor to the ear, pupillo dilator, visceromotor to the muscles of Miller and Landstrom in the eyelid, visceromotor to the nictating membrane of the eye and to the smooth-muscle fibers forming the roof of the sphenoidal fissure, being a part of the floor of the orbit, on which rests the capsule of Tenon. The muscles of Miller and Landstrom are not described in any but the latest textbooks, but can be found in a good histological section of the human eyelid as well as in that of the cat. They connect the upper lid with the ball of the eye and tend to pull the ball forward and upward. The sympathetic root of the ciliary ganglion is derived from the superior cervical ganglion in the cat as in the human.

The experiment is very easily performed on the cat by any one who has even a slight knowledge of surgery. The technique used in the laboratory of physiology of the American School is as follows: The animal is anesthetized, ether being the best agent. Precautions

should be taken to have all instruments, etc., sterile, as well as the hands and clothing of the operator and that of his assistant. An incision is made in the median line, extending from a point just below the thyroid cartilage for a distance of an inch downward. The muscles are separated in the median line, the carotid sheath is lifted up and the vagus nerve dissected out, when the sympathetic will be seen as a small trunk accompanying it. A piece one centimeter in length is cut from the sympathetic, the carotid sheath with its contents allowed to drop back into place, the muscles brought together with four or five interrupted sutures, not too tight, and the shaved edges of the skin brought together and sutured in a similar manner.



The anesthesia is removed and an antiseptic dressing applied, which should be renewed daily until the incision has healed, when the sutures can be cut and pulled out. The stitches in the muscles may remain.

Results: The nictating membrane is pulled about one third of the distance across the palpebral fissure; the pupil is constricted, and the upper lid droops, due to loss of nerve supply to the smooth muscles in the lid (Miller's and Landstrom's). The ear on the same side is very hyperemic. If the animal is kept under observation for a few weeks the whole eyeball will sag slightly below the level of the sound eye, due to atrophy of the smooth muscle across the roof of

the sphenoidal fissure, which normally acts as a hammock to support the capsule of Tenon. The smooth muscles of the lid will atrophy and allow the lid to droop more than at first, until the palpebral fissure is much reduced. As the sympathetic is pilomotor and trophic to the cat's "whiskers," they will at first incline backward and later atrophy and fall out on the side on which the nerve is cut.

Now, in the human subject the sympathetic fibers originate in the second, third and fourth dorsal. If a bony lesion occur there it might or might not result in hypertonicity over the sympathetic. In case it did the smooth muscles in the lid would tend to pull the eyeball slightly forward, the muscle in the sphenoidal fissure would become tensed, resulting in further protrusion of the eye by unduly impinging on the capsule of Tenon. Since the cardio-augmenters are derived from the upper dorsal by way of the sympathetic, tachycardia, one of the cardinal symptoms of exophthalmic goiter, would be a natural consequence, and the functions of the thyroid gland would be perverted (cachexia). Fat would appear in the cavity back of the eyeball formed by the crowding and pulling forward of the same.

Practitioners of osteopathy report that dorsal lesions are present in cases of exophthalmic goiter; also that many cases of lesser eye troubles have been alleviated or cured by correcting upper-dorsal lesions.



PELVIC ATONY

(Illustrated).

By F. P. MILLARD, D. O., Toronto, Canada.

We appreciate in part the finer mechanism of the human anatomy, when we note that the simple act of deep breathing is of systemic significance. Venous drainage in the pelvis is assisted by deep respiration. Shallow breathing aids stasis in the pelvic organs. While this may seem simple, yet it is as important as erect posture, normal musculature, regular heart action, normal tone of vasomotors, etc. If irregularities exist, vasomotor impulses become altered, tissues and vessels are diseased, ligaments unduly relaxed, and the circulation in the uterine and ovarian vessels impaired.

We are prone to forget the lymphatic arrangement in many disorders, but we must not in this particular case, because the lumbar, hypo-gastric, and inguinal glands should be watched for tenderness and enlargement in order that inflammation of these tissues may not be brought about in any respect.

There is a peculiarity regarding the pelvic venous arrangement, and that is their capacity seems out of proportion to that of the arteries. The plexuses of veins located in the broad ligaments is rather extensive, and one notices the comparison in number with that of the arteries.

The vascular supply of the uterus and ovaries is quite distinct, and the vasomotor centres likewise. The ovarian arteries arise from the aorta, receiving a different set of vasomotor impulses than that of the uterine coming from the internal iliacs. (Plate I.) The ovarian vasomotors come from the ninth to the twelfth thoracic segments, while the uterine vasomotors are derived from the lumbar nerves through the ganglionic cord from which the hypogastric plexus is formed. The splanchnic, renal and ovarian plexuses convey the majority of these impulses. Spinal irregularities in the corresponding segments have an important bearing on vasomotor disturbances because lesions affect the vasomotor nerves through disturbance of the spinal nerves before they are connected with the sympathetic chain, (Plate I.) through which these nerve impulses from the spinal cord must pass.

Referring again to the nerve supply of the pelvic organs and tissues, we will state briefly the nerve centres most commonly referred to.

The ovarian plexus is of renal plexus origin, formed by the smaller splanchnic and sometimes from the small splanchnic and first lumbar ganglion. Fibres from the aortic plexus join the ovarian plexus following along that artery.

The hypogastric plexus is situated in front of the last intervertebral disk, at the promontory of the sacrum, between the two iliac arteries, and while devoid of ganglia it is placed in a position to receive the great flow of downward nerves from the aortic plexus and lumbar ganglia. Some of these branches go to the pelvic viscera direct, while the cervical uterine ganglia, termed the "pelvic brain," receive sacral filaments from the second to fourth. The "pelvic brain" referred to is located near the junction of the cervix and uterus on either side, and is connected with the sacral spinal nerves, which pass through it to the adjacent viscera, such as the uterus, bladder, ovaries, tubes, etc. Among the fibres of the plexus are found vaso-constrictors to the same viscera, which are really a continuation of the aortic plexus. Inhibitory fibres to the viscera also come from the lumbar ganglia. Sensory impulses from the viscera pass through this plexus to the upper lumbar and lower dorsal segments.

The nerve area for the pelvic organs includes spinal segments from the ninth dorsal to the fourth sacral. (Plate I.) Lesions in this area, that is below the ninth dorsal vertebra, interfere with the nerves already referred to, lowering pelvic tissue resistance, laying them liable to infection with all its complications. Conversely, pelvic congestion and irritation through infection may produce severe pain with tenderness in lower lumbar and upper sacral regions, as well as across the hips and even a portion of the thighs as the distribution of those nerves will indicate. (Plate II.)

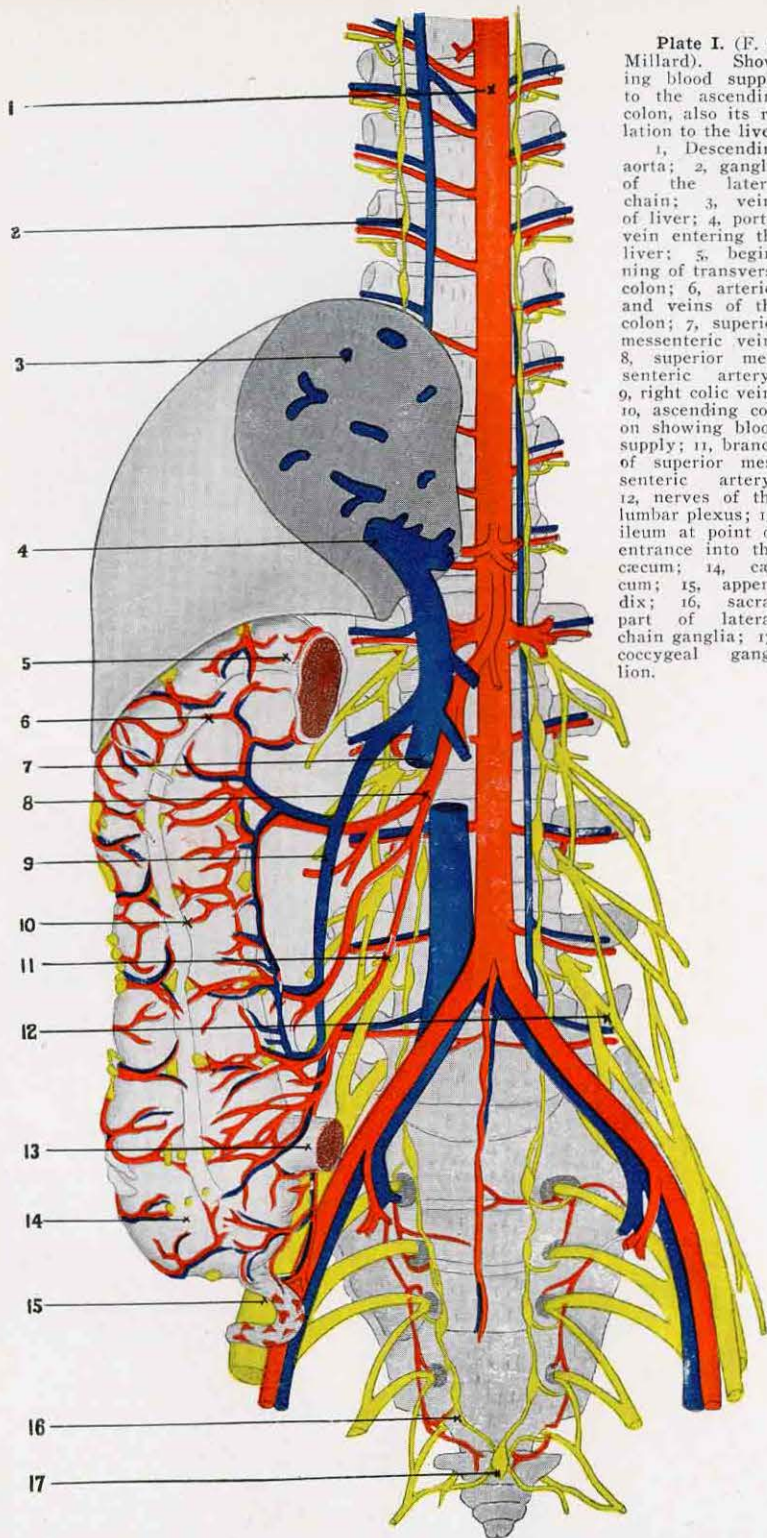
Referring to the ovarian veins and their drainage; you will remember they empty differently on either side, the left passing into the renal vein and the right into the Vena Cava. These veins are, as a rule, valveless, and the left one lies in close relation posteriorly with the sigmoid flexure making pressure easily felt.

Most of the veins in the pelvic region are without valves and depend, as all veins do, upon three principles for emptying them-

Supplement to
THE JOURNAL OF OSTEOPATHY
 Kirksville, Mo., January, 1914.

"The Still-Hildreth Osteopathic Sanatorium people believe at this writing that they will be able to open the doors of their new institution on March 1st. All communications should be addressed to Dr. A. G. Hildreth, Macon, Mo. Those who are desirous of sending patients at that time should make application now, for there are a good many already on the waiting list, and it is absolutely necessary that they make reservation in advance."

Plate I. (F. P. Millard). Showing blood supply to the ascending colon, also its relation to the liver.



1, Descending aorta; 2, ganglia of the lateral chain; 3, veins of liver; 4, portal vein entering the liver; 5, beginning of transverse colon; 6, arteries and veins of the colon; 7, superior mesenteric vein; 8, superior mesenteric artery; 9, right colic vein; 10, ascending colon showing blood supply; 11, branch of superior mesenteric artery; 12, nerves of the lumbar plexus; 13, ileum at point of entrance into the caecum; 14, caecum; 15, appendix; 16, sacral part of lateral chain ganglia; 17, coccygeal ganglion.

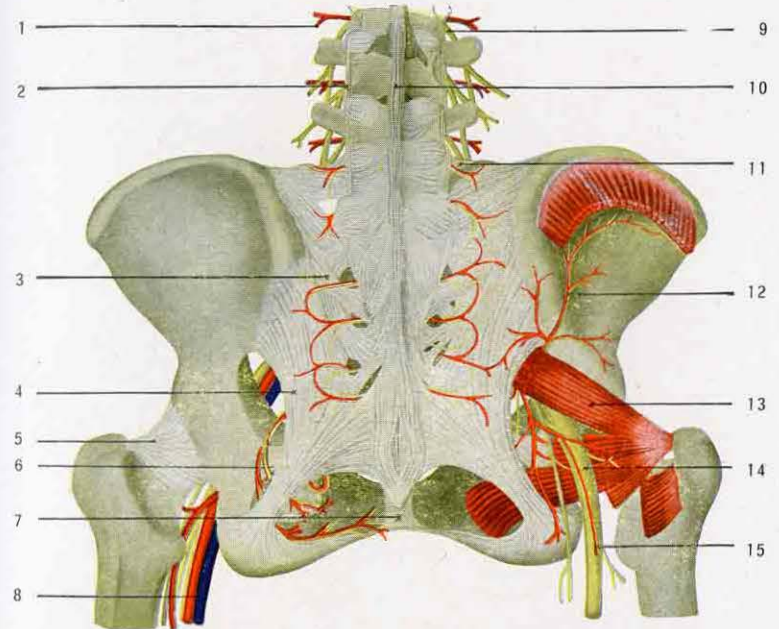


Plate II. (F. P. Millard). Pelvic Nerves and Vessels. 1, Lumbar artery; 2, inter-transverse ligament; 3, posterior sacro-iliac ligament; 4, great sacro-sciatic ligament; 5, capsular ligament; 6, sacro-sciatic ligament; 7, symphysis pubis; 8, femoral vessels; 9, lumbar nerve; 10, supra-spinous ligament; 11, ilio lumbar ligament; 12, gluteal artery; 13, piriformis; 14, sciatic nerve; 15, comes nervi ischiadici.

selves, viz.: first, normal contraction of the muscles surrounding them; second, the valves in certain areas; and, third and most important, the aspirating power of the chest which induces an onward flow of blood. Engorgement, or venous stasis will readily take place through lack of muscular tone, inefficient breathing, or disturbance of the vasomotors through osseous lesions.

As venous stasis in pelvic congestion is possibly as vital as stasis in the splanchnic region proper, every effort must be made to relieve this congestion, or the symptoms will not disappear, but complications ensue.

The lymphatics referred to follow the ovarian vessels, emptying into the lumbar glands; others follow vessels into iliac or vaginal glands, while those from the lower pelvic tissues empty into the inguinal glands.

Referring to reflex pains in the back from pelvic congestion, we are familiar with the pain felt over the sacrum in disturbances of the cervix; over the umbilical region if from the fundus; top of the head, if uterine; down the thigh and in the knees, pain referred through sacral and lumbar nerves from pelvic congestion, and sometimes tissue contraction following the inflammation of the connective tissue. In cases of version, flexion, endometritis, etc., the duration and time of the pain may be a key to the location of the inflamed organ or tissue. In endometritis the pain continues throughout the period, while in that of the ovary it is usually previous to menstruation. In flexion, the pain is usually removed when the flow begins, etc.

We have stated that the nerve supply and control of pelvic tissues is confined almost entirely from the ninth dorsal to the fourth sacral. (Plate I.) If a lesion exists above the ninth thoracic vertebra we may expect reflex symptoms, which may become aggravated through inflammation of pelvic tissues. If the musculature in the lumbar and thoracic region is contracted, the sympathetic chain will be involved through the rami, which are double in part of this particular region. If the muscles are contracted over the sacral nerves, we almost invariably find the pelvic congestion corresponding in severity to the contracted condition of the musculature. As referred to above, these muscular contractions may be secondary to the pelvic disturbances.

The location of the spinal nerve centre of the ovaries is so high

that we sometimes forget to associate a lower dorsal lesion with the ovarian congestion, while the hypogastric plexus may be directly interfered with through the rotation of the fifth lumbar vertebrae, its location being so close.

The lesion may be a rotary one, or a direct slip in its relation to the sacrum, upon which this vertebra rests sustaining the entire weight from above. A close examination of the transverse processes on the two sides, and their relation to the spinous processes above in comparison will confirm one's diagnosis. (Plate II.)

Costal lesions should not be overlooked as the eleventh and twelfth ribs have a direct bearing on the lumbar musculature, as well as the nerve and vascular arrangement, outside of the strong point made by the "Old Doctor" that alteration of the position of the diaphragm, affects the venous flow.

Curves of a compensatory character are sometimes not as easily recognized as specific lesions, although this seems a peculiar statement. It is only by careful examination in two or three positions that a slight curvature is sometimes detected.

Referring to the ligaments holding the pelvis together, (Plate II.) and the spine resting upon it from slipping to any marked extent, as well as retaining the femurs in their sockets, we have but to refer to the cause of atony in this particular region. These ligaments are nourished and toned through practically the same area that supplies the pelvic organs and tissues, a rule which holds good almost throughout the body. If the ligaments of the knee are involved, the musculature around the knee is also affected, because the nerves are from the same segment. This is for protection, as the muscles around the knee will tighten and prevent the joint, from being disturbed, the same as in appendicitis when the abdominal muscles will contract protecting in a measure the tissues around the appendix.

The tone of the pelvic ligaments, depends upon the normal condition of the lumbo-sacral cord and sacral nerves. (Plate I.) The greatest amount of nerve supply is from the sacral nerves themselves, while with some ligaments, as in the lumbo-sacral articulation, the lumbar nerves are the source of supply as high, at least, as the fourth lumbar, and in the ilio-femoral articulation, nerve filaments come from as high as the first lumbar and as low as the third sacral.

Upon the tone of the pelvic ligaments much depends. The

slipping of an innominate often means the relaxation of the important binding ligaments; until tone is re-established, an innominate will not always stay in place. Femurs have been known to drop from their sockets in a protracted illness. In fact, occasionally a patient refers to his joint as if it were loose.

If a normal tone is to be expected in these joints, perfect freedom must be established in the circulation supplying the segments from which these nerves arise, and likewise freedom from pressure along the course of the nerve supplying these tissues.

Referring to the sacral plexus, its relation to the pyriformis should be mentioned. In its relation to the anterior surface of this muscle, the anterior divisions of the sacral nerves pass between the digitations, making them liable to muscular pressure through contracture.

The psoas magnus should also be carefully diagnosed in the lumbar region as lesions are liable to disturb the tendinous arch or arches through which the sympathetic nerve fibres connect with the spinal. While in the substance of the muscle itself a part of the lumbar plexus is conveyed, and contracture of this muscle should be closely watched. Trouble may arise in the pelvic diaphragm through coccygeal lesions. (Plate I.) The effect of an impacted caecum is readily seen, and visceral ptosis is not uncommon.

HOSPITAL NOTES

(Copied from Daily Press).

The A. S. O. Hospital Interne Examinations.

As previously announced, the examination for internships in the A. S. O. Hospital was held on Monday afternoon, December 15th, from two o'clock to five-thirty and on Tuesday afternoon, December 16th, from two o'clock to five and there were eleven contestants.

The examinations were both written and oral, and also practical demonstrations.

The contestants all did very well considering the rigorous examination and the wide range of subjects.

Not one of the eleven quit and any one of the exam. papers written would have passed any state board in America. The practical work included the demonstration of the rolling, preparing

and correctly wetting the plaster bandage in making a cast, starting with the raw materials.

The use of various diagnostic instruments was demonstrated to the examiner and then each one had to demonstrate in addition to the above, various matters of sick room technique and treatment.

Under the osteopathic demonstration each one had to demonstrate the correction of an anterior dorsal region with the third dorsal rotated to the right; also, a posterior right innominate, and an anterior occipito-atlantal lesion with contractures on the right.

This technique was graded very closely.

Among the written questions on the first day were the following:

1. Differentiate and treat biliary obstruction.
2. Give details of the treatment of acute blood poisoning.
3. Give the non-surgical treatment of acute appendicitis.
4. Give indications for the operation of appendicitis.
5. Define surgery, osteopathy, perineorrhaphy, carbuncle, furuncle, caruncle, aseptic, ptomain, leucocytosis, leukemia, leucocain.
6. Give the differential stain of the gonococcus.
7. Treat a case of first stage locomotor ataxia.
8. Definition, etiology and treatment of a Charcot joint.
9. Treat a second degree burn.
10. Give the pathology of hemorrhoids and their surgical and non-surgical treatment, with indications of both.

Tuesday's Written Questions.

1. Give detailed treatment of a case of small-pox.
2. Give outline, differential diagnosis of miliary tuberculosis, typhoid fever, malaria and sepsis.
3. Give cardinal symptoms of brain tumor.
4. Give the pathology of tuberculosis near the knee joint.
5. Give the treatment of tuberculosis of the lower end of the radius.
6. HYPOTHETICAL CASE: Male patient, age about forty, was found unconscious on the evening of July 4th and ordinary means of stimulation failed to arouse him. He had a pulse rate of sixty-eight, rather full, a contusion of the scalp, a "black eye," a four or five days growth of beard, a normal respiration and the odor of alcohol on his breath. Differentiate the conditions that

might cause his coma and select the most likely one, giving all the reasons for your diagnosis.

7. For this question AN ACTUAL CASE IS PRESENTED with the following symptoms: Male, aged thirty-three, had been shot from behind and to the right side with a small calibre rifle bullet, which entered to the right of the spine about three inches and between the fourth and fifth ribs.

The patient was unconscious and pulse could not be detected from about five minutes after the injury for two hours, gradually rallied and was brought by rail to the hospital on a stretcher.

Three days ago he suddenly developed a complete hemiplegia, preceded by no warning symptoms and after an interval free from fever.

This hemoiplegia is associated with difficulty in speech, but no real aphasia, the difficulty being purely peripheral motor.

QUESTION:—Locate and describe the present lesion, which is the only thing that could have caused the present condition. Also, tell what vessel the bullet must have struck to give this lesion. Give the treatment and the prognosis, both for life and for the recovery from the paralysis.

Interne Examination Continued.

The announcement of the winners in the examinations was to have been made some time after the holidays but after looking over the papers, Dr. George Still, who conducted the examinations, decided a further test had best be made although from the nature of the test it is doubtful if any one will score less than 100 per cent.

This test in plain English means that Dr. and Mrs. George Still will give a dinner party at their home to the contestants on the evening of January 7th. The invitations, which were issued yesterday, rather startled those receiving them until they read them to the end.

The announcements appeared on the regular official hospital letter paper and were enclosed in the official hospital envelopes. They were type written like any business letter and read as follows:

Dear Doctor:

The interne examination will be continued Wednesday evening, January 7th, at 7:00 p. m. at the home of Dr. George Still, 502 South Osteopathy Avenue.

The questions will all be oral and there will be one particularly interesting post mortem, on which consultation of all present will be asked:

Representative questions will be as follows:

1. Will you have some of the soup?
2. Will you have some of the salad?
3. Will you have some of the oysters?
4. Will you have some of the cranberries?
5. Will you have a slice of the breast?
6. Will you have potatoes and gravy?
7. Will you have olives?
8. Will you have some lettuce?
9. Will you have coffee?
10. Numerous other questions will be propounded.

The post mortem will be held on the young thirty-eight pound Bourbon Red Turkey that won first at the recent Adair county poultry show.

The "post" is to reveal whether such a bird makes good brain food and whether it is ever entitled to any blue ribbons. Instead of pencil and paper, bring appetites and capacity.

Yours sincerely,

GEORGE A. STILL.

Music by the Gottreu-Ashlock Orchestra.

Those who competed in the examinations were: H. T. Ashlock, class 1899 and 1907, and the following from the present senior class: Miss Mary Commerford, Messrs. Otis Dickey, H. C. Gilerest, W. C. Goodpasture, H. S. Hain, E. C. Hyatt, C. Moore, D. M. Stahr, and Bismark Von Pertz.

BOOK REVIEWS

A Text-Book of the Practice of Medicine.—By James M. Anders, M. D., Ph.D., LL.D., Professor of Medicine and Clinical Medicine, Medico-Chirurgical College, Philadelphia. Eleventh edition thoroughly revised. Octavo, 1335 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$5.50 net; Half Morocco, \$7.00 net.

Bear in mind this is the eleventh edition. The work shows in general, the present state of our knowledge of the practice of medicine and in particular, diagnosis, differential diagnosis, and treatment of disease. Bacteriology has been prominently mentioned, and differential diagnosis in many instances tabulated; there being

not less than fifty-six diagnostic tables scattered through the work. Modern orthography and terminology has been given preference. The author has brought the book down to date and among the more important additions may be mentioned: Weil's test in syphilis, radium emanations in gout, Falk and Salomon's reaction in gastric cancer, chloride retention theory of renal dropsy, and Towns-Lambert method of treating morphinism. We bespeak for this work a ready sale.

A Text-Book of Physiology.—For Medical Students and Physicians. By William H. Howell, Ph.D., M. D., Professor of Physiology, Johns Hopkins University, Baltimore. Fifth edition thoroughly revised. Octavo of 1200 pages, fully illustrated. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$4.00 net; Half Morocco, \$5.50 net.

This book is used as the adopted text at the American School of Osteopathy. The author aims first at **lucidity** and **simplicity** and second at a **judicious limitation of material selected**. He has succeeded well in both particulars and presents a book equally valuable to students and practitioners.

SAUNDERS' QUESTION COMPENDS.

Since the issue of the first volume of the Saunders' Question-Compend, over 342,000 copies of these publications have been sold. This enormous sale forces us to the conclusion that these self-helps are of much value to both students and physicians. The compends after giving a clear, concise treatment of a subject refers the student to the larger texts upon which it is based. The following three books, (a) Essentials of Bacteriology, (b) Essentials of Gynecology, (c) Essentials of Nervous Diseases and Insanity all belong to **Saunders' Question Compend**, and each gives an excellent discussion of its subject.

Essentials of Bacteriology.—By M. V. Ball, M. D., formerly instructor in Bacteriology at the Philadelphia Polyclinic. Seventh edition, revised. Assisted by Paul G. Weston, M. D., Pathologist State Hospital for Insane at Warren, Pa. 12mo of 321 pages, with 118 illustrations, some in colors. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$1.00 net.

Essentials of Gynecology.—By Edwin B. Cragin, M. D., Professor of Obstetrics and Gynecology, College of Physicians and Surgeons, New York. Revised by Frank S. Matthews, M. D., Assistant Professor of Clinical Surgery, College of Physicians and Surgeons, New York. Eighth edition thoroughly revised.

12mo of 240 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$1.00 net.

Essentials of Nervous Diseases and Insanity.—By John C. Shaw, M. D., Late Clinical Professor of Diseases of the Mind and Nervous System, Long Island College Hospital. Fifth edition, thoroughly revised, by Louis Casamajor, M. D., Chief of Clinic, New York Neurological Institute. 12mo of 187 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1913. Cloth, \$1.00 net.

Students usually have four or five texts each containing from 1000 to 2000 pages. To them it is often a delight to find what they want in 100 or 200 pages instead of having to read 1000 or 2000 pages.

Dorland's American Illustrated Medical Dictionary.—A new and complete dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Veterinary Science, Nursing, Biology, and kindred branches; with new and elaborate tables. Seventh revised edition. Edited by W. A. Newman Dorland, M. D. Large octavo of 1107 pages, with 331 illustrations, 11 in colors. Containing over 5,000 more terms than the previous edition. Philadelphia and London: W. B. Saunders Company, 1913. Flexible leather, \$4.50 net; thumb indexed, \$5.00 net.

This is a most excellent dictionary. The author has succeeded in producing an up-to-date dictionary of convenient size which is varied enough for all classes. The definitions are **clear, concise,** and yet sufficiently **complete.** In addition to the usual anatomic and clinical tables will be found tables of Tests, Stains and Staining Methods, Methods of Treatment, etc. **The important features of pronunciation and derivation have received most careful attention.** The book has an attractive appearance. The last revision brings it right down to date. The seventh edition of this dictionary, as preceding editions, merits a good sale.

The Elements of Bandaging, Fractures and Dislocations.—By William Rankin, M.A., M.B., Ch.B. Dispensary Surgeon, Western Infirmary, Glasgow. Extra Honorary Assistant Surgeon, R. H. S. C., Glasgow. Sixty-eight original illustrations. London: Henry Frowde and Hodder & Stoughton, Oxford University Press, Warwick Square, E. C. American Branch, 35 West 32d Street, New York. Price \$1.50. 1913.

This is a most excellent little book of 116 pages on bandaging fractures and dislocations. The book is intended more for students and those whose experience is limited. Great stress is laid on the

every day complications. Emphasis is laid on the necessity for and value of Anaesthesia in the diagnosis and treatment of fractures and dislocations. The book is short, concise, complete.

Diseases of the Nervous System.—For the General Practitioner and Student. By Alfred Gordon, A.M., M.D. (Paris). Late Associate Professor in Nervous and Mental Diseases, Jefferson Medical College; Late Examiner of the Insane, Philadelphia General Hospital; Neurologist to Mount Sinai Hospital, to Northwestern General Hospital and to the Douglass Memorial Hospital; Member of the American Neurological Association, Fellow of the College of Physicians of Philadelphia; Corresponding member of Societe Medico-Psychologique of Paris, France; Member of the American Institute of Clinical Law and Criminology, etc. Second edition, revised and enlarged, with one hundred and sixty-nine illustrations. P. Blackiston's Son & Co., 1012 Walnut Street, Philadelphia. Price \$4.00. 1913.

Gordon's "Diseases of the Nervous System," a book of about 600 pages, is running in its second edition. The book is not only for the practitioner but also for the student. The author gives a **plain and practical** account of diseases of the nervous system. The account of any disease is preceded by its **pathology**, followed by its **symptomatology**, and **differential diagnosis.** Full consideration is given to the **course, termination, prognosis** and **etiology** of the disease. The **treatment** of diseases is given much attention. Chapter II deserves the attention of students in particular. It deals with the **Method of Examination** of nervous diseases. In the second edition each chapter was revised and enlarged and among the more important additions may be mentioned: (1) Fracture of the Skull; (2) Concussion of the Brain; (3) Lumbar Puncture; (4) Cerebro-spinal fluid; (5) Wasserman Reaction; (6) Radiculitis; (7) Psychoanalysis. While practitioners will find this book of much value, students will do well to examine it with a view to using it as a text.

Practical Prescribing (With Clinical Notes).—By Arthur H. Prichard, M. R. C. S., L. R. C. P., R. N. (Rtd.). Late House Physician, The Brompton Hospital, and Resident Surgeon, R. N. Hospital, Gosport. Published by the Joint Committee of Henry Frowde and Hodder & Stoughton, at the Oxford Press Warehouse, Falcon Square, London, E. C. American Branch, 35 West 32d Street, New York. Price \$2.00. 1913.

This book shows side by side the prescription sheet and clinical notes. The brief cases and notes are not designed as models upon

which hospital records should be kept but to render clear the object of treatment. Particular attention is called to several cases of disorders common to early childhood.

The following will show the general arrangement of the contents of the book:

Prescription Sheet.

Fourth Day

(IV).

R *Sodii Citratis, ʒi
(Lactis, ʒxxx), m. d. s.

Treatment

Fourth Day

Vomiting, which has occurred some minutes after feeding, was unduly acid, and contained small portions of clotted matter. The child had, contrary to instructions, been allowed pure cow's milk.

Milk again diluted—etc.

The Practitioner's Practical Prescriber (and Epitome of Symptomatic Treatment).—By D. M. Macdonald, M. D. Medical Officer of Health, Leven, Fife. Published by the Joint Committee of Henry Frowde and Hodder & Stoughton at the Oxford Press Warehouse, Falcon Square, London, E. C. American Branch, 35 West 32d Street, New York. Price \$1.50. 1913.

This is a small book of 198 pages which may easily be carried in the pocket. The first 135 pages is devoted to formulæ which are given with the disease treated—the diseases being arranged alphabetically. The rest of the book is made up of short chapters on posological tables, emergencies in everyday practice, diet tables, recipes, pregnancy tables, tuberculin in practice, vaccines, etc. followed by a good index.

The following recipe is taken from the book:

Albumen Water. Take the white of a fresh egg, break it up and shake in a bottle containing half a pint of cold water and a pinch of salt, then strain through muslin.

Notice of State Board Examinations

The Nebraska Osteopathic State Board will conduct the next semi-annual examination at the State House at Lincoln, Nebraska on Wednesday and Thursday, February 4 and 5th, starting at 9 a. m. Wednesday morning. Direct all communications to Dr. C. B. Atzen, 412 Omaha National Bank Building, Omaha, Nebraska.

The South Dakota Osteopathic State Board will hold their examinations in Pierre, S. D. February 10 and 11, 1914. All communications should be addressed to Dr. Mary Noyes Farr.

The Michigan Osteopathic State Board will hold their examinations at Ann Arbor, Michigan February 11 and 12. Make applications early. All com-

munications should be addressed to Dr. Carrie C. Classen, 1st National Bank Building, Ann Arbor, Michigan.

The Tennessee Osteopathic State Board. The next regular meeting of the Tennessee State Board of Osteopathic Examination and Registration will be held in Nashville, Tenn., February 13 and 14th, 1914. All communications should be addressed to Dr. Carey T. Mitchell, 602 Hitchcock Building, Nashville, Tenn. All applications should be in by the 10th of the month.

PERSONALS

Brings Case to the Hospital. Dr. I. W. McRae of Trenton, Mo. brought a surgical case to the A. S. O. Hospital to be operated upon by Dr. George Still.

Wife of Osteopath Brought to the A. S. O. Hospital. Dr. G. P. Smith, of Humbolt, Tenn., brought his wife to the hospital to be operated upon. It is reported that she is doing nicely.

Announcement. Dr. C. A. Dodson, of Little Rock, Ark., announces that he has with him in his office, 822-824 State Bank Building, Dr. Clara E. Henke, who will limit her practice to diseases of women and children.

Called on Journal Office. Dr. E. Williams, of Holton, Kans., made the Journal Office a pleasant call on December 17. He left for Indiana and Illinois where he expects to visit relatives for a short time.

Made the Journal Office a Pleasant Call. Dr. M. E. Ilgenfritz spent Christmas with his mother and father in Kirksville, and while here he called on the Journal Office and we must say that we enjoyed his visit very much.

Passed South Carolina Board. Dr. Mary B. Herbert who successfully passed the South Carolina State Board is now located at 143 Salinda St., Chester, S. C.

A Successful Practice. Dr. Geo. G. Brownback, a recent graduate of the A. S. O. is now located in Dillon, Mont. Dr. Brownback thinks that Montana is the best state in the Union from the standpoint of climate as well as Osteopathy. He is doing considerable acute work.

Osteopath Gives Expert Testimony. On December 14, 1913, Dr. W. A. Wood of Centralia, Illinois, was called upon by the officials of the Illinois Southern Railroad Co. and summoned to appear in court, to give expert testimony in a damage suit against the Railroad Co. Dr. Wood examined the plaintiff, whom he had never seen before, and testified as to the condition. The fact that the Railroad Co. sent some eighty miles for an osteopath to make this examination is just another instance of the advancing recognition of Osteopathy.

Osteopath Lectures. Dr. F. W. Clark of Marysville, Kans., has accepted an invitation to give a series of lectures on physiology and anatomy to the boys and young men of that city. The lectures are given Sunday afternoon in the Athletic Hall.

Visits Kirksville. Dr. Geo. E. Fout and wife of Richmond, Va., spent the holidays at Kirksville, visiting at the home of W. G. Fout and E. C. Brott, Sec'y. of the A. S. O.

Received Notice of the Marriage of Dr. E. A. Freeman. At the home of Mr. and Mrs. J. C. Snyder, 703 9th Ave., Fulton Ill. on December 26th 1913 at 6 p. m. occurred the marriage of their eldest daughter Miss Ada Snyder to Dr. E. A. Freeman of Lewiston, Me. The couple left that night for Syracuse, N. Y. for a short visit with Dr. Freeman's parents and from there went to Lewiston, Me. where on January 1st the Doctor opened his office. Dr. Freeman is a graduate of the June 13 class and Miss Snyder was a member of the January 16 class of the A. S. O.

Obligated to Give up Practice. Due to sickness, Dr. Carl Wetzel, of Stillwater, Okla., is obliged to give up practising for the present at least. Dr. Wetzel would be glad to rent or sell his office furniture to any osteopathic physician who may wish to locate there.

News Notes From Oregon

The December meeting of the Portland Osteopathic Association was held in Drs. Gertrude Gates and E. T. Parker's office, 922 Corbett Building, Tuesday evening, December 16th.

Dr. D. D. Young of McMinnville, Oregon, gave an able discussion and demonstration of the "Technique for clearing the Nasopharynx and Eustachian Tube in Partial Deafness" after the method used and demonstrated at the A. O. A. Convention, Kirksville, Mo., and given in the August 1913 A. O. A. Journal.

Dr. Hammett N. Lacy of Portland gave a talk and outline of his "Routine examination of a patient," which was most instructive, telling in detail of his method of keeping a case report and record of the lesions found.

Dr. Otis F. Akin presented a clinic and conducted an interesting discussion by informal questioning which proved most beneficial as a review for diagnosis.

The annual election of officers results in the following officers for the year 1914:

- Dr. Luther H. Howland, Selling Building, President.
- Dr. Kathryn Rueter, Selling Building, Vice-President.
- Dr. Agnes M. Browne, Journal Building, Secretary.
- Dr. Elizabeth E. Smith, Selling Building, Treasurer.
- Dr. Katherine S. Meyers, Journal Building, Curator.
- Dr. R. B. Northrup, Morgan Building, Trustee.
- Publication Committee, Dr. F. E. Moore, Selling Building, Chairman.

This Hermetically-Sealed, (Wrapper Removed) Sanitary Container

was designed for, and is exclusively used by, the manufacturers of the original and only

Antiphlogistine
TRADE MARK

No human hand contacts with Antiphlogistine from the first step in its manufacture until it is applied by the Doctor or Nurse at the bedside.

Antiphlogistine is accurately weighed, by special mechanism, into the seamless container already sterilized by super heated steam—and the lid "crimped" on by high pressure.

Thus the highly hygroscopic character of Antiphlogistine (on which its therapeutic power largely depends) is maintained, absolutely, until the can is opened for clinical application of the remedy. See that the genuine is used, Doctor!

A copy of our "Pneumonia" booklet sent on request, if you have not already received one.

Antiphlogistine is prescribed by Physicians and supplied by Drug-gists all over the world.

"There's Only ONE Antiphlogistine"

THE DENVER CHEMICAL MFG. CO., NEW YORK, U. S. A.



A Normal Bodily Condition

May be maintained by proper nutrition and tone; a long convalescence can be shortened, and anemia and emaciation prevented by

BOVININE

Which contains the vital elements of nutrition and nerve tone, as indicated by the full, normal physiological standard, namely

PROTEINS
OXYHEMOGLOBIN
ORGANIC IRON
ALBUMINS

Write for Sample, also for one of our new Glass (sterilizable) Tongue Depressors.

THE BOVININE COMPANY

75 West Houston Street,

New York City

Program Committee, Dr. Agnes Browne, Journal Building, Chairman.

Dr. Elizabeth Lane-Howells of Corvallis, Oregon was in Portland the past month for consultation. Dr. Howells and Dr. Emily Malcomson are associated in practice.

Dr. J. L. Walker of Sunnyside, Wash. has visited Portland twice the past month, coming with operative cases to Dr. Otis F. Akin. Dr. Walker was the bacteriologist at the American School of Osteopathy during his senior year there.

Dr. McMorris M. Dow of Central Point, Oregon, was visiting with the osteopathic physicians of Portland during the month.

Dr. J. A. Van Brakle of Oregon City continues to be the Health Officer of Clackamas County. This month his case will come to trial.

Dr. Virginia Leweaux of Corvallis, Oregon was a guest at the Oregon Hotel, Portland, recently, coming to attend the Melba-Kubelik concert given at the Armory.

H. C. P. MOORE, Editor,
Oregon Osteopathic Association.

ASSOCIATIONS

Iowa Osteopathic Association. The Osteopaths of the first district of the Iowa Osteopathic Association met in Waterloo December 10 and the following program was given: "Aids in Diagnosis," Dr. Ruth M. Wright, Charles City. "Failures Due to Mistakes in Diagnosis," Dr. F. C. Liffing, Waterloo. "Case Reports," Dr. Isadora McKnight, Oelwein. "Osteopathic Technic," Dr. N. D. Wilson, Manchester.

Southwestern Michigan Osteopathic Association. The bi-monthly meeting of the association was held January 3 in Dr. J. S. Blair's office in the Ward building, Battle Creek, Mich. Dr. A. C. Williams was in charge of the clinics and gave some excellent demonstrations.

Ozark Osteopathic Association. The Ozark association held its regular monthly meeting on December 20 at the office of Dr. I. L. James in the Woodruff building. The subjects for discussion were "Diseases of Children" and "La Grippe." Dr. Noland read a very interesting paper on "Significant Signs and Symptoms of Children's Diseases." Dr. W. B. Lyke discussed "The Treatment of La Grippe." The association will meet next month with Dr. T. M. King in the Woodruff building.

Hudson River North Association. The regular monthly meeting was held Saturday evening, December 8, at the office of Dr. A. E. Were of Albany. The next meeting will be held January 3 at the office of Dr. Owen at Mechanicsville.

Arizona Osteopathic Association. Dr. Charles Bradbury who has recently located in Arizona, having passed the medical board of that state, is working for the organization of an association in that state.

Vieno Bran

REMOVES THE CAUSES OF
(CURES) CONSTIPATION

Vieno Bran is the outer coating of the white Winter wheat thoroughly cleansed and rescored.

WHAT IT CONTAINS

Vieno Bran is combined with another one of Nature's best and purest foods. Together they form a soft natural intestinal broom.

Vieno bran possesses valuable, curative and nourishing qualities. It is rich in mineral salts, iron, protein and phosphates, and harmonizes chemically with all other foods. It contains absolutely no extract, no drugs, or chemicals.

WHAT IT WILL DO

It establishes natural peristaltic action of both the stomach and intestines. It moves things on in the natural way, therefore aids in the digestion and assimilation of other foods. It will remove causes of indigestion, fermentation and constipation and when these things have been removed or cured, such disorders as intestinal gas sluggish liver and autointoxication will disappear.

When the bowels have become regular the quantity of Vieno Bran may be gradually diminished and after a time omitted altogether if desired.

In every box there are 20 Health Rules and Recipes for the preparation and administering of Vieno Bran for all stages of constipation, fermentation, etc.

SOME COMPARISONS

Purgative or laxative medicines poison the system and irritate the intestines.

The bowels act upon medicine and cast it out because it is an offense to Nature.

Vieno Bran nourishes the system and heals the intestines.

Vieno Bran acts upon and strengthens the bowels because it is a natural food and a natural laxative.

Modern milling methods have taken all the coarse fiber out of our foods. This coarse stuff, called cellulose, is absolutely necessary to good health. Vieno Bran as we prepare it puts back into the diet what civilized ignorance has taken out of it. It supplies this coarse element and promotes both stomach and intestinal digestion. In doing this it prevents constipation, indigestion, fermentation, intestinal gas, and other intestinal disorders.

Send for our booklet "A Revolution in Bread Making."

WE MAKE SPECIAL INDUCEMENTS TO OSTEOPATHIC
PHYSICIANS TO TRY THIS FOOD.

Send 20c for trial package by mail, or

Send \$1.00 for special trial order, express prepaid.

THE CHRISTIAN CO.,

213 W. 79th St.,

New York.

When Writing Advertisers Please Mention the Journal.

Florida Osteopathic Association. The association met December 26 in connection with the Gulf States Association at Jacksonville. The president of the association is Dr. J. C. Howell of Orlando. A very interesting program was rendered.

Southwestern Osteopathic Association. This association met at Wichita, Kansas December 29. Dr. C. B. Atzen, president of the A. O. A. and Dr. C. P. McConnell, president of the Chicago College of Osteopathy, were among the early arrivals. An unusually interesting meeting is reported.

San Joaquin Valley Osteopathic Association. The meeting was held December 3 at Modesto, California in the offices of Dr. J. P. Snare in the Coffee Club building. About 30 members of the association were present.

The Northwestern Osteopathic Association. The meeting was held at Duluth, Minn. December 16. The association filed a protest against unlicensed practitioners. The following is taken from the resolutions: "We wish to call attention to the fact that manipulation of the body by unlicensed persons is as dangerous as the administration of drugs by unlicensed persons."

The Third Illinois District Osteopathic Association. The meeting was held on the afternoon of January 2 in Dr. Hemstreet's office. There was a good attendance. Dr. E. R. Proctor of Chicago was the principal speaker of the evening his subject being "Osteopathic Diagnosis and Technique." Dinner was served at the Elks Club. Senator Compton of Macomb and Hon. R. M. Marsh of Galesburg responded to toasts.

Virginia Osteopathic Society. The society was called to order by the president, Dr. S. H. Bright of Norfolk at the Jefferson Hotel on December 13 at 7:30 p. m. The meeting was well attended and much enthusiasm prevailed. Dr. E. H. Shackelford of Richmond was nominated to the governor as osteopathic member of the State Board of Medical Examiners.

Ohio Osteopathic Society. The meeting was held at the Chittenden Hotel in Columbus, Ohio December 31. The meeting was well attended and much interest was shown. While many prominent speakers were present especial mention is made of Dr. George Laughlin's work in giving a practical demonstration of the Lorenz operation and Dr. F. C. Farmer of the A. T. Still Research Institute of Chicago who demonstrated the Abbott method of correcting spinal curvature.

Two Associations Meet Together. The Western New York Osteopathic Association and the Rochester District Society of Osteopaths held a convention in the Y. M. C. A. building at Batavia, N. Y., on January 6th. An excellent meeting was reported.

Maine Osteopathic Association. The quarterly meeting of the M. O. A. was held in the assembly room of the Congress Square Hotel, Portland.

If You Know a Young Man

who is about to take up the study of medicine, by all means advise him to get

PIERSOL'S ANATOMY

It is the new and standard pictorial anatomy, used in a majority of the schools, and it

Will Save Him Money

as it gives gross anatomy, histology, embryology, applied anatomy, with the most accurate and beautiful illustrations ever printed.

J. B. Lippincott Company

PHILADELPHIA - - - Since 1792

LONDON - - - - - Since 1875

MONTREAL - - - - - Since 1897

Used as the text book at the American School of Osteopathy

When Writing Advertisers Please Mention the Journal.

Me. January 3, 1914. First session opened at 11 a. m. with a paper on Pathology of Venereal Diseases; slides shown with microscope by Dr. T. L. McBeath of Rockland; discussion by Dr. Fred Kincaid of Skowhegan. Dinner 1 p. m. at same hotel. Business meeting at 2 p. m. followed by discussion on Adjustment of Old Subluxations by Dr. E. S. Winslow of Waterville and others. Next meeting to be held at Brunswick. F. M. Opdycke, D. O. Secretary.

Southwestern Osteopathic Association. The association held its meeting December 29 and 30 at Wichita, Kans. The program is a booklet of twenty pages and is elegantly printed. This was one of the best meetings the association has held.

Business Opportunities

For Sale.—Good practice for woman osteopath in Illinois, County seat. Practice averages two hundred dollars per month and has been established for several years. Would consider monthly payments from receipts, and will sell either with or without office furniture. Rent low. Reasons for selling given to those interested. Address "H. N." care of the Journal.

For Sale.—Seniors' notice. Will sell my practice cheap. Location Northern Missouri. Will pay for itself the first month. Established fourteen years. Reasons for selling, am leaving state. Address "15" care of the Journal.

For Sale.—Practice in central Minnesota, population about 1500. \$300 will buy office furniture and practice. Reason for selling, on account of ill health. Address "K" care of Journal.

For Sale.—Good practice for woman osteopath in Illinois, county seat. Practice averages two hundred dollars per month and has been established for several years. Would consider monthly payments from receipts and will sell either with or without office furniture. Rent low. Reasons for selling given to those interested. Address H. N. care of the Journal.

For Sale.—Practice in Northern Illinois. Good Collections. Wealthy community. Practice established five years. Good reasons for selling. Investigate if interested. Address "J" care of the Journal.

Wanted.—By January '14 graduate, a position as assistant or take charge of a practice. Male, 28 years old. Can give best of references and is not afraid to work. Would consider a partnership or buying a practice. Address "C" care of the Journal.

Many Osteopathic Physicians Find It a Great Help



YOU doctors of Osteopathy have the faculty of finding the *cause* of ailments in your patients. You are not given to treating symptoms. You seek out the *source* of trouble. And *very often* you find the source of trouble in the spine—a deflected vertebra, a slight or perhaps well-defined curvature, or tender spots at various points. Now, in cases of that sort, in addition to the regular osteopathic treatment many of your brother practitioners have found a most efficient aid in the

Sheldon Spinal Appliance

The Sheldon Appliance serves to give your patients the utmost good from your scientific treatments. It supplements your work by helping *retain* the results as you achieve them step by step. A great many osteopathic practitioners of highest repute use the Sheldon Spinal Appliance in all their cases of spinal trouble with distinguished success.

30-Day Guaranteed Trial

We will make to order a Sheldon Appliance for any case you are treating, allow its use on a 30-day guaranteed trial and refund the price, \$25, if, at the expiration of the trial period, the appliance is not satisfactory in your judgment.

request we will send detail and illustrated description of the Appliance, and letters from osteopathic physicians in evidence of its corrective efficiency. Write today. Special discount to physicians.

HILO BURT MFG. CO.

163 13th St.

Jamestown, N. Y.

WE INVITE ALL DOCTORS OF OSTEOPATHY TO INVESTIGATE MINERAL ABSORPTION

The Absorbent Compress contains a mineral which has an active affinity for the germs and impurities of the body which are the cause of disease. The Compress, when applied over the diseased area, has an action like a magnet in drawing these to the surface, absorbing them, and eradicating them from the system

TREATMENT IS PURELY EXTERNAL

The Compress is used externally and is absolutely harmless. It lends itself especially to the osteopathic practice. It is prompt and radical in its action, and has proved itself successful in a large number of cases where other methods have failed.

We wish every osteopathic physician to make the most critical tests of the therapeutic value of the Absorbent Compress. Write us.

Book fully explaining our methods of treatment, and giving the most conclusive proofs of its efficiency will be sent on application.

Absorbent Compress Company

75 State Street.

ROCHESTER, N. Y.

SCIENTIFIC EATING

I have prepared a course of study in Scientific Eating which teaches you how to select, how to combine and how to proportion your food at meals.

These lessons are the boiled down results of 20 years' study and experience in treating over 20,000 people by scientific eating.

These lessons make the taking of instructions from so-called food experts unnecessary. They make every person their own food doctor. They teach you how to select, how to combine and how to prepare common every-day food so as to get natural results. Natural results mean health. In other words, these lessons teach you how to give Nature the proper tools to do her work with.

The Government teaches farmers how to feed cattle and hogs so as to make them healthy. These lessons do the same thing for people, why not?

Dr. H. W. Morse of Hartford, Conn., one of the most learned men in the medical profession writing of this book said:

"Scientific Eating is a wonderful little book. It tells of a science that will do more to cure disease than all the drugs in the world."

Drop me a card and I will send you this little book free of charge. It explains my course of lessons and incidentally tells why civilized man is only 51 per cent efficient and lives an average of only 39 years and 3 months.

EUGENE CHRISTIAN, F. S. D.

213 W. 79th St., New York

A New Book On

CURATIVE DIET

Called "250 Meatless Menus and Receipts"

By EUGENE AND MOLLIE GRISWOLD CHRISTIAN.

Part of the Special Christmas Edition

Chapters.

Menus and Recipes.

Diet for School Children.

Balanced Menus for the Manual

Dietetic Do's and Don't's.

Laborer.

Over Eating.

Balanced Menus for the Sedentary Worker.

Refrigerator and Kitchen Hygiene.

Soups, Cooked.

Feminine Beauty.

Soups, Uncooked.

Feminine Freedom.

The Balanced Menus are New and Scientific. They are the Most Useful, Instructive and Important Part of this Work.

This book tells how to select and combine your food at each meal, according to age, occupation, etc.

Its purpose is to lighten woman's labor—to make the food the family doctor—to increase the pleasure of eating and decrease the expense account.

It is pronounced by authorities to be the most advanced and practical work ever written on the food question.

It contains about 200 pages and 250 new, delicious and unique dishes.

You probably know how to put the material together to make a good house or a good suit of clothes. Why not send for this book and learn how to put the material together that will make the best blood, bone and brain?

It is beautifully illustrated and bound in vellum and gold. Price, \$1.00 postpaid. Clubs of five, 80 cents per copy, postpaid.

Address EUGENE CHRISTIAN. 213 W. 79th St., New York City

When Writing Advertisers Please Mention the Journal.

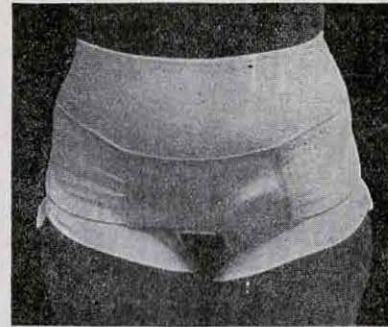
THE STORM BINDER and ABDOMINAL SUPPORTER

(PATENTED)

IS ADAPTED TO USE OF MEN, WOMEN, CHILDREN AND BABIES
Whalebone, No Rubber Elastic, Washable as Underwear, Light, Flexible, Durable, Comfortable.



Woman's Belt—Side Front View



Inguinal Hernia Modification

A SPECIAL support in cases of prolapsed kidney, stomach, colon, relaxed sacroiliac articulations, an. hernia; a GENERAL supporter in pregnancy, obesity and general relaxation; as POST-OPERATIVE Binder after operation upon the kidney, stomach, bladder, appendix and pelvic organs, and after plastic operations and in conditions of irritable bladder to support the weight of the viscera.

ILLUSTRATED FOLDER AND TESTIMONIALS OF PHYSICIANS ON REQUEST
MAIL ORDERS FILLED WITHIN 24 HOURS

KATHERINE L. STORM, M. D., 1541 Diamond St., Philadelphia, Pa.

The Leucodescent Therapeutic Lamps

is the standard apparatus for the therapeutic application of light energy. It can be used with surprisingly satisfactory results in more than three fourths of the cases that occur in a general medical practice.

One physician says of the Leucodescent: "It will make you more friends than any other apparatus you can install in your office."

Let us tell you our plan by which you can install the Leucodescent now without increasing your present expense.

Valuable literature on Light Therapy sent on request.

The Leucodescent Lamp Company
P. O. Box 25S CHICAGO, ILL.

OSTEOPATH COATS

Sold on a GUARANTEE of Perfect Satisfaction or your Money Refunded.

Our guarantee covers everything; quality, Workmanship, Fit and style. You take no risk.

All materials are thoroughly shrunk and all colors fast.

We make

25 Different Styles

in over 40 selected patterns. Express charges prepaid to all points. Samples and instructions for measuring are sent FREE.



Style 18.

M. WEISSFELD MFG. CO.
253 S. Market St. PHILADELPHIA, PA.
NOTICE. We have no branches and are not connected with any other firm. Patrons who give orders to our agents should see that the order goes to us.

LOCATIONS AND REMOVALS

- Brownback, Geo. G., to suite 3-4 Telephone Block, Dillon, Mont.
 Bullock, W. E., from Ft. Morgan, Colo., to Ridgway, Colo.
 Draper, L. L., from Camden, N. J., to Huntington, N. Y.
 Drinkall, Nellie B. Clarke, from Acton, Mass., to 6726 Sheridan Road,
 Rogers Park, Chicago, Ill.
 Henke, Clara E. 822-24 State Bank Building, Little Rock, Ark.
 Herbert, Mary B., to Chester, S. C.
 Howells, A. P., from Corvallis, to Albany, Ore.
 Keller, O. C., from Big Sandy, Mont., to Lewiston, Idaho.
 McCole, Geo. M., from the Conrad Building, to Rooms 516-517 First Na-
 tional Bank Building, Great Falls, Mont.
 Patterson, E. W., from Dawson Springs, Ky., to 516 Equitable Building,
 Louisville, Ky.
 Price, Emma Hook, from 40 Hoke Building, to Room 9 Whiteside Build-
 ing, Hutchinson, Kans.
 Raindge, H., from Washington, Mo., to 114 W. Main St., Mechanicsburg,
 Pennsylvania.
 Tandy, R. T., from second floor of Saunders Building, to ground floor,
 Southwest Cor. of Square, Grant City, Mo.
 Wright, Henry E., from Seymour, Ind., to Box 22, Noblesville, Ind.

MARRIED

- Dr. Petrus E. Johnson to Gertrude Stevenson at Ogden, Utah, Dec. 13.
 Dr. C. W. Eells to Ada Adams at Redding, Calif., Dec. 10.
 Dr. E. A. Freeman to Ada Snyder at Lewiston, Me., Dec. 26.

BORN

- To Drs. S. & Lova D. Borough, at North Manchester, Ind., Dec. 2, a son.
 To Dr. Morris M. & Mrs. Brill, at New York City, N. Y., Dec. 17, a son.
 To Dr. & Mrs. A. D. Becker, at Preston, Minn, Dec. 29, a son.
 To Dr. and Mrs. G. M. Laughlin, at Kirksville, Mo., Jan. 17, a daughter.

DIED

- Mrs. Elizabeth H. Ridout, mother of Dr. Eleanor R. Dashiell, 90 Glou-
 cester St., Annapolis, Md., January 6, 1914.
 Mr. James Casey, father of Dr. Eugene M. Casey of Binghampton, N. Y.,
 at New Milford, Pa., December 20, 1913. Aged 71.
 The father of Dr. Jessie L. Catlow, of Boone, Iowa, December 23, 1913.
 Mrs. Gertrude Warren Swope, wife of Dr. Chester D. Swope, at Wash-
 ington, D. C., November 30.

LISTERINE

Listerine is an efficient, non-toxic antiseptic of accurately determin-
 ed and uniform antiseptic power, prepared in a form convenient for im-
 mediate use.

Composed of volatile and non-volatile substances, Listerine is a
 balsamic antiseptic, refreshing in its application, lasting in its effect.

Listerine is particularly useful in the treatment of abnormal con-
 ditions of the mucosa, and admirably suited for a wash, gargle or
 douche in catarrhal conditions of the nose and throat.

In proper dilution, Listerine may be freely and continuously used
 without prejudicial effect, either by injection or spray, in all the natural
 cavities of the body.

Administered internally, Listerine is promptly effective in arrest-
 ing the excessive fermentation of the contents of the stomach.

In the treatment of summer complaints of infants and children,
 Listerine is extensively prescribed in doses of 10 drops to a teaspoonful.

In febrile conditions, nothing is comparable to Listerine as a
 mouth wash; two or three drachms to four ounces of water.

"The Inhibitory Action of Listerine"—128 pages—may be had upon application to manuf'rs

LAMBERT PHARMACAL COMPANY

Locust and Twenty-first Streets

ST. LOUIS, MISSOURI.

Producing

Perfect Printing Plates

requires

Science and Skill

as truly as does the practice of Osteopathy.

Years of experience, a fully equipped plant, efficient
 artists and operators give *our printing plates* the quality
 so much in demand by discriminating buyers of photo-
 engravings.

For convincing proof send us a trial order.

BIERMAN ENGRAVING CO.

Perfect Printing Plates

Third and Edmond Streets

St. Joseph, Missouri

When Writing Advertisers Please Mention the Journal.

JUST OFF THE PRESS

THE ONLY BOOK ON THIS SUBJECT

THE INTERVERTEBRAL FORAMEN

By Dr. Harold Swanberg.

With an introductory note by one of the foremost anatomists in this country.

This book is absolutely unique. It is an atlas and histologic description of the intervertebral foramen and its adjacent parts with special reference to the relations of the nervous structures. The first and only scientific work on this subject. It contains sixteen beautiful full page plates, from the highest price half tone engravings, printed on the most expensive engraver's proving paper. None of these plates have ever before appeared in print, having been especially prepared for this work. The size of the spinal nerve in proportion to the intervertebral foramen is clearly shown. The immediate relations of the various parts of the spinal nerve any sympathetic fibers to bone, fibrous tissue, fat, muscle and blood vessels is easily seen and thoroughly explained. This book contains no theories. One can see these parts just as they normally are. You can then formulate your own opinion about nerve pressure, impingement, irritation, etc., and how it is caused. It is a work every Osteopath needs. Descriptive circular free. The book is printed on the best book paper, well bound in silk cloth and is a splendid product of the printer's art.

Price \$3.00 postpaid to any address.

CHICAGO SCIENTIFIC PUBLISHING COMPANY

S. W. Corner Grace and Osgood Sts.,
CHICAGO, ILL.

INTRODUCING THE NINTH ANNUAL "OSTEOBLAST."

The ninth annual "Osteoblast" of the A. S. O. will contain 350 pages.

It is interesting many of our alumni, in view of the fact that it will contain a lively review of the A. O. A. convention, together with cuts made from pictures during the convention, and a complete representation of every department of the A. S. O., including all fraternities, clubs and organizations here instituted.

Alumni whom we have written personally, have given us their orders for the "Osteoblast" have taken the time to state in their letters that the "Osteoblast," when placed on their reception tables, is the best means their patients have of getting the inside view of this institution, its departments and activities; thereby establishing an important fact in the mind of the laity, i. e. we have as many students following one line as any medical institution in the country, and incidentally we let them understand we have the ability to get out one of the classiest college annuals in the United States.

The "Osteoblast" is costing \$2500.00 and we are desirous to get this convention number upon the reception tables of our alumni, and if you are not pleased with this volume for \$3.00 to be prepaid upon its receipt send the annual back to us at our expense.

"THE OSTEOBLAST" STAFF,
Kirksville, Mo.

When Writing Advertisers Please Mention the Journal.

Principles of Osteopathy

Third Edition Revised

This is a down-to-date Text Book which presents the Principles of Osteopathy in a comprehensive manner, suitable for students and practitioners. The subject presented from the clinician's point of view.

The Author aims to give a sane presentation of the practical usefulness of osteopathic principles.

256 Illustrations.

528 Pages.

Price \$5.00, carriage prepaid.

Ask your book dealer for it, or send to the author,

DR. DAIN L. TASKER

526 Auditorium Bldg.

Los Angeles, - - - California.

Miller and Goodson

316 West Jefferson

Phone 130

Recommended by The Leading Osteopathic Schools

DIAGNOSIS AND TREATMENT OF DISEASES OF WOMEN

GIVES THE MOST APPROVED METHODS OF GYNECOLOGIC
DIAGNOSIS AND THERAPEUTICS

By HARRY STURGEON CROSSEN, M. D.

Associate Gynecologist, Washington University Hospital, and Associate in Gynecology, Washington University Medical School. St. Louis. Royal octavo, XXXII and 1026 pages, with 744 engravings. Third revised editionCloth, \$6.50.

A medical book that passes into a third edition in five years has a message. The systematic manner with which gynecological diagnosis and treatment are handled in this volume makes it of inestimable value to the student, the general practitioner and the surgeon. Nothing is taken for granted. The greatest care is given to systematic examination, careful and painstaking diagnosis, and the application of the most improved methods of treatment. Its increasing popularity is ample evidence of the esteem in which it is held by the medical profession. This book is now used in the majority of medical schools in this country, and is the recommended text in the American College of Osteopathy, and other leading osteopathic schools.

THE C. V. MOSBY CO.,—Medical Publishers
301-807 Metropolitan Building. ST. LOUIS, U. S. A.

When Writing Advertisers Please Mention the Journal.

EDGAR'S

4th Edition. 25th Thousand. Rewritten. Revised.

BY J. CLIFTON EDGAR, M. D.

Professor of Obstetrics and Clinical Midwifery, Medical Department of Cornell University, New York City; Attending Obstetrician to the New York Maternity Hospital, etc.

Review from the American Journal of Obstetrics:—

"The author speaks through the work with the authority conferred by his great clinical experience of some 20,000 cases, more or less under his personal observation during the past eighteen years. Each edition of his work approaches more closely to the ideal of perfection. It is a veritable mine of information and a most valuable reference book. It is safe, reliable, encyclopedic, and of the highest excellence."

OBSTETRICS

Review of a previous edition from the British Medical Journal:

"It is in reality the most comprehensive treatise on the science and practice of midwifery that has yet appeared. It is distinguished from all previous works on the subject by its extraordinary wealth of illustration.

The book is a great work, the most notable addition to obstetric literature that has appeared in recent years."

1316

ILLUSTRATIONS

36 Figures in Colors. 8 vo 1084 Pages

CLOTH \$6.00 { POSTPAID
EXPRESS PAID

Full descriptive, illustrated circular and portrait of author free upon request.

PUBLISHERS

1012 Walnut St. Philadelphia P. Blakiston's Son & Co 1012 Walnut St. Philadelphia

When Writing Advertisers Please Mention the Journal.

NEW WORK

JUST READY

Diseases of the Stomach

INCLUDING DIETETIC AND MEDICINAL TREATMENT

By GEORGE ROE LOCKWOOD, M. D.

Professor of Clinical Medicine, College of Physicians and Surgeons, Columbia University, New York; Attending Physician to Bellvue Hospital, New York.

Octavo, 624 pages, with 126 engravings and 15 plates. Cloth, \$5.50 net.

It has been the author's intention to describe the diseases of the stomach as he has happened to see them, and to present these subjects from the standpoint of personal experience. For this purpose series of cases have been grouped and analyzed and the results noted. When the results have been at variance with the accepted teachings, the fact has been noted, and opposing views given free discussion, but no attempt has been made to alter the analyses of the case histories. Each series has comprised as many cases as possible, differing in number according to the frequency of the disease under discussion. In the analyses of diseases of comparative rarity, the recorded cases have, as a rule, been read in full in the original articles and the statistics thus carefully worked out. These pages, therefore, reflect careful study of diseases from private and hospital case records and from authentic histories in literature.—From the Preface.

NEW WORK

JUST READY

Medical Men and the Law

A MODERN TREATISE ON THE LEGAL RIGHTS, DUTIES AND LIABILITIES OF PHYSICIANS AND SURGEONS

By HUGH EMMETT CULBERTSON, Esq.

Member of the Ohio and New York Bars; Contributing Editor to many legal publications. Octavo, 325 pages. Cloth, \$3.00 net.

Most medical men enter upon practice with perhaps a general sense of responsibility, but with no knowledge at all of their myriad rights, duties and liabilities as viewed by the law. No matter what his professional qualifications may be, a physician lacks the armor of self-protection if he fails to understand the reciprocal obligations between himself and the public. The penalty is commensurate with the responsibilities attaching to his profession, which deals with issues of life and death. The body of law covering all the relations between the physician and the public is very definite, but it has never before been gathered into a comprehensive, clear and authoritative statement. This book deals not only with regular medicine and surgery, but also with the legal aspects of all the other methods of healing which are practiced at the present time. Every medical man who values his own peace of mind and material welfare will find this work replete with information of the utmost practical importance.

NEW (3rd) EDITION ENLARGED AND THOROUGHLY REVISED

JUST READY

Nervous and Mental Diseases

FOR STUDENTS AND PRACTITIONERS

By CHARLES S. POTTS, M. D.

Professor of Neurology in the Medico-Chirurgical College of Philadelphia. 12mo, 610 pages, with 141 engravings and 6 plates. Cloth, \$2.75, net

The success of this manual, reflected in the demand for a third edition, may be attributed to two excellent points—brevity and clearness. It is not intended as a full work for the specialist, but as a concise guide for the general practitioner and compact text-book for the undergraduate student. It is designed to reduce to a minimum the mental effort necessary for the comprehension of these intricate subjects and to effect the greatest economy of the reader's time. This revision has been a thorough one, and the text portrays the subject at the date of issue. A description of tic, embodying the present-day view of that disorder, and short descriptions of myotopia atrophica, progressive lenticular degeneration and dysbasia lordotica deformans have been added. The chapter on general symptomatology and methods of examination has been amplified. The illustrations have also received careful attention, several new ones being added.

706-8-10 Sansom Street.
PHILADELPHIA

LEA & FEBIGER

2 W. Forty-Fifth Street.
NEW YORK

When Writing Advertisers Please Mention the Journal.

The "ALBRIGHT" Patent Table

(BALL BEARING)

FOR

Simplicity of Construction
Luxurious Upholstery
Beautiful Finish

Smooth, Delightful, Effective

Treatment That Wins and
Holds Patients

*Write us today for particulars
of our 1914 Models*

Chester W. Albright Company

Main Office and Factory 907-909 East 75th St.
CHICAGO

When Writing Advertisers Please Mention the Journal.

Cutting Prices

MEANS ONE OF TWO THINGS—

Either an unreasonable profit was added in the beginning or the dealer has lost confidence in the quality of his goods and his ability to sell them on their own merits.

SUPPOSE YOU PAY A STIPULATED PRICE

For a McManis Treating Table and find out later that you can buy one for less money. Would you be impressed with our stability and integrity?



REMEMBER—

That to increase YOUR EFFICIENCY, to make YOUR TREATMENTS more desirable and to prolong YOUR DAYS as an osteopathic practitioner is OUR BUSINESS.

SPECIAL FEATURES OF OUR TABLE ARE—

Self Sustaining Resilient Universal Leaf, Torsional or Canting Leaf, Stretching Device (Traction with Manipulation), Lateral or side movement with or without a Gap in Table, without Friction upon Patient's Chest, Leg Hooks, Spring Tension Device, Friction Clutch, Gynecological Feature, Hydraulic Lift, Finish, Stability and Durability.

McManis Table Company

500 West Jefferson St.

J. F. JANISCH, Mgr.,

Kirksville, Mo.

When Writing Advertisers Please Mention the Journal.

Still-Hildreth Sanatorium

WE are glad to announce that the work of putting the buildings at Macon in shape for occupancy is progressing in fine shape and while it is impossible as yet to state the exact date, we feel that it will be ready near March 1st. However, further notice will be given of the day of opening—and when notice is given we hope that those who have patients they wish to send to us will make their application in advance—for the reason that numerous letters are now on file—and the indications are that our capacity, though large, will soon be exhausted—and that we will be forced to say that first come first served. All letters from applications now on file will be answered by personal letters just as soon as we can know the exact date of opening. Never before during the life of Osteopathy has any proposition received the unanimous united support or universal endorsement of the entire profession, as is given to the proposed Macon institution and we are much gratified for several reasons. First, because we are able to offer to our profession a property of such splendid value to be used for the benefit of humanity and Osteopathy. Second, that we were the instruments through which such a long needed institution could be owned and controlled absolutely by our own profession. Third, because we know that in ten years time we will be able to give to the world a clinic record that must and will call the attention of the entire scientific world to our practice. And we are grateful again because we believe—yes, we know that the establishment of such a Sanatorium means one of the strongest factors in demonstrating not only our financial ability to own desirable property but to handle a class of patients that heretofore we have been unable to reach. We are thankful for it all, and we are so glad that the entire profession joins us in this feeling. All letters of inquiry should be addressed to Dr. A. G. Hildreth at either Macon, Mo., or 706 Century Building, St. Louis, Mo. until further notice.

A. G. HILDRETH, D. O.

Pres. Still-Hildreth Sanatorium

When Writing Advertisers Please Mention the Journal.

The A. S. O.

will send out this month another class of students to be called Osteopathic Physicians—we hope they will be worthy of the name—

*For Good Name Means
Success*

And we've picked a good name for our clothes

SINCERITY

They have made good for us
and will make good for you.
Clothes make the man.

SELLERS OF FACTS AND VALUES

Sincerity  Clothes

HARRY BAMBURG, Proprietor

When Writing Advertisers Please Mention the Journal.

Hygienic Superiority of Nemo Corsets

THE steady increase in the demand for Nemo Corsets is largely due to the fact that the public at large is at last beginning to realize the vast amount of suffering that is caused by improper corseting.

Any physician will tell you that there is an appalling increase, year after year, in the number of women who must undergo surgical operations to correct certain organic ailments which are easily traceable to unhygienic corsets. This is a frightful menace to future generations as well as the present. The remedy lies in educating the trade and the public to full recognition of this evil and the means of averting it.

With this important and far-reaching public service in mind, we have founded a department under the supervision of a skillful osteopathic physician and hygienist, and also a competent authority on fashion.

Our purpose is to fit corsets that will prevent organic troubles as well as cure them; corsets that will control the form and mold it into fashionable lines without undue pressure or contraction; and that, while giving perfect style-effects, will permit the growth and development of the body and of the organs that are vital to the health of all women, the useful functions of which are today in danger of being destroyed.

Address or call on

Thompson, Hunsaker & Vanskike
Kirksville, Mo.

When Writing Advertisers Please Mention the Journal.

Try The *Rexall Store*

OUR STOCK includes Drugs and Chemicals, Household Remedies, Sick Room Goods, Absorbent Cotton, Adhesive Tape and Bandages, Toilet Articles and Brushes, Rubber Goods, Pocket Books and Purses, Stationery, Wall Paper and Window Shades.

B. F. Henry Drug Co.

Phone 7—South Side Square

When Writing Advertisers Please Mention the Journal.

A Pamphlet of 20 Pages

State Board Requirements

Price 25 Cents

Fill out blank and send to
Journal of Osteopathy Publishing Co.
Kirksville, Mo.

Name.....

Address.....

DOCTOR! Infantile Paralysis OR Spinal Curvature



You cannot afford to lose your patient who is in need of a good appliance. We guarantee for our braces as the best designed and fitting braces as our braces made from plaster are only.

FULL PARTICULARS GLADLY
FURNISHED UPON REQUEST

Rehthaler Orthopedic Appliance Company
605 Kesner Bldg., 5 N. Wabash
CHICAGO, ILL.

Uphold the dignity of your profession by the use of

Proper Stationery

250 Letter Heads } **\$2.50**
250 Envelopes }

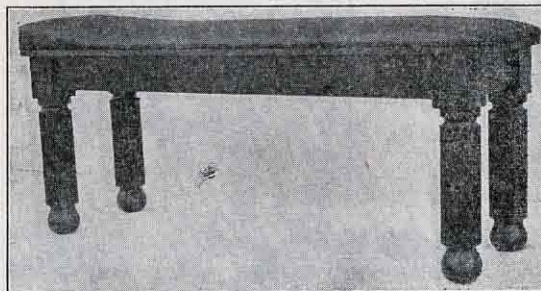
Quality of material and correctness of style guaranteed by the

A. M. S. PUBLISHING COMPANY
KIRKSVILLE, MISSOURI

Good Osteopathic Treating
Tables and Stools at very
reasonable prices.

Tasker's 1913 Principles\$5.00
A.T. Still Research,
\$6.00 and\$8.00
W. H. Laughlin's Anatomy\$6.50
Deason's Physiology,
\$4.00 and\$4.75
Gerdine's Nerve Chart .75
Boyes' Brain & Cord .75
All books prepaid. Address
orders to

J. F. JANISCH SUPPLY HOUSE, KIRKSVILLE, MO.



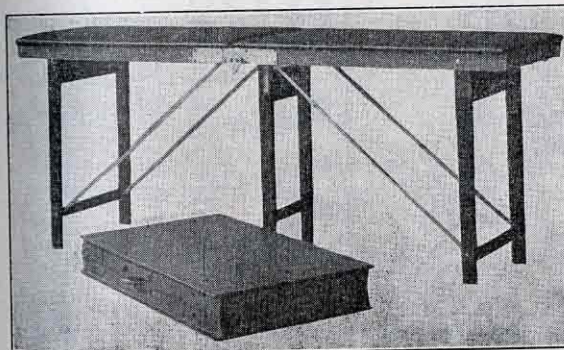
OSTEOPATHY

Research and Practice.

By ANDREW TAYLOR STILL Founder of the Science of Osteopathy
543 Pages. Leather, \$8.00 Net. Express prepaid anywhere in the
United States.

DR. A. T. STILL,

KIRKSVILLE, MISSOURI



Suit Case Folding
Table, \$8.00, \$12.00 and
\$16.00.

Dr. Deason's Physiology, a thorough Osteopathic book, \$4.00 and \$4.75.

Dr. Bierns books, 3
Vols., \$4.00 each.

Dr. Still's Research and Practice \$6.00 and \$8.00.

Send for the Osteopathic Novel, indosed

by Dr. Dodson and other leading D. O's., \$1.50.

Frenche's Differential Diagnosis, \$8.00, recommended by Dr. Gerdine, for use of Osteopaths.

All Medical and Osteopathic books.

A. S. O. Book Company

Kirksville

(COOPER)

Missouri

When Writing Advertisers Please Mention the Journal.

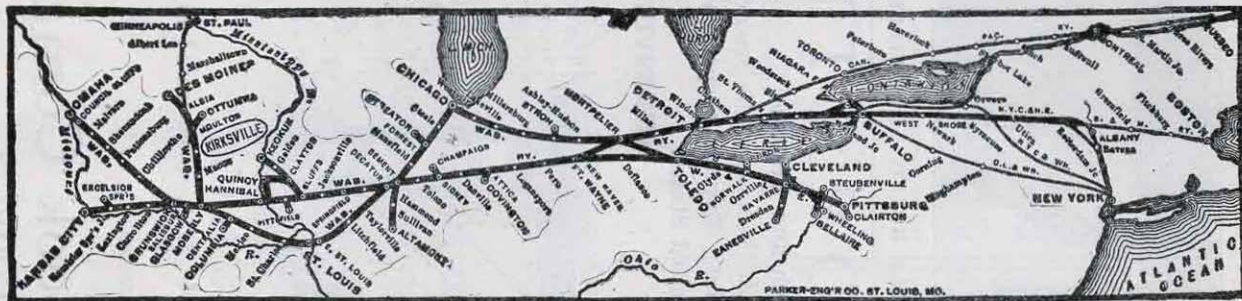
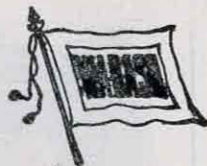


"FOLLOW THE FLAG"

TO

KIRKSVILLE

EIGHT TRAINS EVERY DAY



WABASH

THROUGH SLEEPING CAR SERVICE BETWEEN KIRKSVILLE AND ST. LOUIS, KANSAS CITY, DES MOINES, MINNEAPOLIS AND ST. PAUL.

THE DIRECT LINE FROM BOSTON, NEW YORK AND BUFFALO TO KIRKSVILLE.



J. D. McNAMARA,
General Passenger Agent,
ST. LOUIS, MO.

M. T. WARDEN,
Agent,
KIRKSVILLE, MO.



AMERICAN SCHOOL OF OSTEOPATHY

The First Osteopathic Institution.
The Largest College and Hospital Buildings.
The Best Equipped Laboratories.
A Faculty of Specialists.

Students of the American School of Osteopathy are in charge of experienced physicians and teachers, who devote their entire time to the school work, under the supervision of the Founder of Osteopathy. : : : : :

For Catalogue and Literature address,

THE AMERICAN SCHOOL OF OSTEOPATHY
KIRKSVILLE, MISSOURI.



HOSPITAL

COLLEGE BUILDING

The A. S. O. Hospital

offers to the osteopathic profession an institution which combines safe, modern surgery and modern diagnostic methods with osteopathic treatment and an osteopathic atmosphere.

The terms are as reasonable as is compatible with good service.

Private Wards, \$10.00 per week.

Private Rooms, \$15.00 and \$20.00 per week.

These rates include board and nursing.

The rate for special nurses is \$3.00 per day in the hospital or \$25.00 per week outside. On account of the great demand for osteopathically trained nurses we are often unable to supply outside calls, as the hospital cases must, of course, be given first attention.