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Original Articles.

ANNUAL ADDRESS.*

G. A. Warren,
Black Rock.
President of the Arkansas Medical Society.

I shall attempt to give you a brief history of the Arkansas Medical Society, and its doings for the past quarter of a century. The Society was organized in Little Rock during the spring of 1875, and the first president was Dr. W. B. Welch of Fayetteville. My information is that Dr. R. G. Jennings was the first secretary, and he held the position for six years when he was elected president. Dr. L. P. Gibson succeeded Dr. Jennings as secretary in 1881 and held that position till 1895, when he was elected president.

During the first twenty years the society met in various towns of the state, but in Little Rock in about alternate years; especially was this true during the latter half of this period. During this time such men as P. O. Hooper, A. A. Hornor, J. A. Dibrell, W. M. Lawrence, J. H. Southall and Edwin Bentley have filled the position of president.

From 1875 to 1902 we had an organization very different from the present one. While it was entitled to a delegate to the American Medical Association, yet it was not an integral part of that organization as it is today. Prior to 1902 we had our own constitution, by-laws, etc., which might differ from the laws of every other state, we also had few and very few county societies. One could become a member of the State Society without being a member of any county organization, and to the contrary. The dues of the State Society was then $2.00 per year, and payable at the annual meeting. Each member had to pay his own dues, or see that someone else paid it for him. While the State Society was then small; consisting of from two to three hundred members, yet it was a real live organization, and had a great time at the annual meetings. There was always the banquet, at which wines were served, and we ate, drank and were merry.

For many years the Society was composed of sections, namely: Section on Surgery, Practice, Obstetrics and Gynecology, and Diseases of Children. After that were added from year to year, other sections, such as Genito-Urinary, Dermatology, Ophthalmology, Laryngology, Pathology, etc., until it became top heavy and all sections were dropped. At that time there was a chairman and secretary for each section, and two or more sections could have programs at the same time. But this was not satisfactory. I really believe there should be four sections, but probably the present plan is best for our state organization. If, however, the program were too long, too many papers to be read in general sessions, I see no objection to dividing the society into sections; but today our program is not too extensive to be rendered at one general session, and give every one a chance to hear all the papers and discussions if he so desires.

There have been many discoveries in medical science during the past quarter of a century. Prophylaxis for yellow fever and typhoid fever were not known twenty-five years ago; in fact, the only artificial immunity known and practiced then was vaccination against Variola and that had been known for a hundred years. We did know, or were beginning to know, that diphtheritic antitoxin would attenuate the disease, and materially lessen the death rate from this malady. We also knew that by injecting a small dose of the anti-toxin into a person who had been exposed, would give him a passive immunity, and temporarily protect him against the disease, but this immunity was of a few weeks duration and if the party were so unfortunate as to be exposed to the disease anew every six weeks he would have to have an immunizing dose of the serum after each exposure. We now know that by a different method of immunizing we can establish an active immunity against diphtheria which lasts as long as an

*President's Address before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

immunity given by an attack of the disease. We also know that we can give temporary immunity against scarlatina, whooping-cough and other common diseases. We can reduce the death rate and lessen the severity of many other diseases by administering a vaccine or serum treatment after the disease has been established, but to be of much benefit this treatment must be begun early, or during the first few days of the disease. While Pasteur had discovered a protection for rabies more than twenty-five years ago, yet the Pasteur treatment prior to that was clumsy, expensive and barbarous, and the only Pasteur Institute where treatment could be given was in Paris. A few years later we had one in New York City, followed by others in Philadelphia, Chicago, Baltimore, Boston and other medical centers. A patient to be treated must attend one of these institutes, but today a patient who has been inoculated by the virus of rabies can be protected against the disease at his home, if his physician is a scientific, progressive doctor, as well as in Paris, or any of these other medical centers, and the treatment is so much more simplified than it was a quarter of a century ago that it is not a hard-ship on the patient to administer it. The early treatment was attended by pain, swelling and a decided reaction. The present day treatment is so simplified that it produces little of the bad effects formerly produced.

When we contemplate the discoveries and advances that have been made in medicine and surgery during the last quarter of a century, we wonder how the doctor managed his patients, or the patients endured the disease, yet the founders of our society were about as successful in treating the common ailments as we are today. While they knew nothing of spirochæte pallida, the injections of mercury nor of the 606 or its modifications, yet the physicians here in Hot Springs, were successful in treating syphilis before these discoveries, by the use of mercurial treatment internally, externally and by fumigations; also by the use of iodides, or mixed treatment, together with the baths in this hot water, and the treatment of this one disease made Hot Springs famous above everything else. Today the Hot Springs physicians have little advantages over the doctors in other towns, or even in the country, in treating syphilis, yet I grant you that there is something in the name of Hot Springs; but that something was given it by your predecessors in the old method of treating syphilis. Do not misunderstand me. I do not deny that there is virtue in Hot Springs' water for treating other diseases especially rheumatism and various inflammatory diseases and even syphilis, but you do not hold the key to the avenue that leads from syphilis to health as you once held it. I believe that a physician today who fails to use the advances made in therapy during the last twenty-five or thirty years is guilty of malpractice and should have his license revoked. Of course, he should use all of the remedies that are known to have virtue, no matter how long they have been in use.

In yesterday's Arkansas Democrat I noticed this caption, "TYPHOID FEVER RAPIDLY VANISHING." This article said that the death rate which was formerly 19.6 per 100,000 has been reduced to 3.7, or about one-fifth of what it formerly was. This data was taken from the Journal of the American Medical Association.

Coming back to my subject, I will say that from twenty-five years ago up to five years ago, there was always selected at our meetings a chairman on the Committee of Nutrition, whose office existed for one day only, when his successor would be named, the duty of this chairman of nutrition was to see that none of the members of the committee took too much nutrition, either solid, semi-solid or liquid, and especially the liquid. Today that committee has lost its field of usefulness.

Taking up the organization from 1895 to the present time I give you the following data: In 1895 the Arkansas Medical Society met in Little Rock and aside from our regular banquet there was a steamboat excursion up the river, and a barge was secured which had a dancing floor. Refreshments were provided and a most pleasant afternoon was spent. Dr. L. P. Gibson was elected president and Dr. Frank Vinsonhaler re-elected secretary. There were present at that meeting about one hundred and twenty-five doctors.

In 1896 the Society met at Fort Smith, but as I was not permitted to attend this session, I can give you none of the details. Dr. A. J. Vance of Harrison was elected President, Dr. Vinsonhaler re-elected Secretary. In 1897 we met in Little Rock in what was then the K. of P. Hall. At that time the X-Ray was just coming in, and for the first time many of us saw the bones in the living body of our friends and ourselves. Aside from our regular banquet we were given a reception and dance at a Pavilion in Braddock's Park. Dr. J. G. Eberle of Fort Smith was elected President, Dr. Vinsonhaler, Secretary. In 1898 we met in Eureka Springs and there were scarcely a hundred doctors in attendance. We were given a dance in a pavilion at the Crescent Hotel the first night, and a banquet at the hotel the last night. Dr. I. N. Love, then of St. Louis, was a very entertaining

visitor at that session. Dr. J. W. Hays of Eureka Springs was elected President and Dr. Vinsonhaler re-elected Secretary. In 1899 we met in Little Rock. At this meeting aside from our regular banquet a reception was given by Dr. Edwin Bentley. Dr. Claiborne Watkins of Little Rock was elected President and Dr. Vinsonhaler re-elected Secretary. In 1900 we met in Fayetteville. The place of meeting was to have been Jonesboro, but because of an epidemic of smallpox, Jonesboro was under strict quarantine, and we were not permitted to go there. For our entertainment in Fayetteville we were given a reception at the University in addition to receptions given in town. Dr. W. B. Lawrence of Batesville was elected President and Dr. Frank Vinsonhaler was re-elected Secretary.

In 1901 we met in Hot Springs and were given a reception and dance at the Arlington Hotel the evening of the first day. The last afternoon a ride up Happy Hollow and over the Reservation. Dr. Frank Vinsonhaler was elected President, and Dr. J. P. Runyan, Secretary.

In 1902 we met in Little Rock and at this meeting the plan of our present organization was submitted to us by the American Medical Association and so far as possible was adopted. A new constitution, however, had to lie over till the next year. Dr. C. R. Shinault, then of Helena, was elected President and Dr. Runyan re-eleeted Secretary. In 1903 we met in Jonesboro, and had a distinguished visitor, Dr. J. N. McCormaek of Bowling Green, Kentucky, who instructed us on the plan of the new organization of the American Medical Association, and explained to us the new eonstitution which was adopted at that session. We were given a banquet at the Warner House, and a reception at the residence of Dr. J. L. Burns. Dr. L. Kirby of Harrison was elected President, Dr. Runyan re-elected Secretary. In 1904 we met in Texarkana, and at this meeting Drs. Gibson, King and myself, as I remember were appointed on a committee to eonsider the feasibility of establishing a Society Bulletin to take the plaee of the Medical Journal which had been discontinued two years previously. The Bulletin was adopted, and was continued for two or three years, when the present Journal was founded to take its place. Dr. J. P. Runyan was elected President and Dr. C. C. Stephenson, then of Little Rock, was elected Seeretary. In 1905 we met in Little Rock and in addition to our usual banquet we were given a reception at the home of Dr. J. A. Dibrell. Dr. S. M. Carrigan of Hope was elected President and Dr. C. C. Stephenson re-elected Secretary. In 1906 we met in Hot Springs and had a distinguished visitor, Dr. Joseph Matthews, of Louisville, Kentueky, who gave us a most interesting and helpful address. We were given a reception and dance at the Park Hotel. Dr. C. T. Drennen was elected President, Dr. Stephenson re-elected Secretary. In 1907 we met in Little Rock, and at this meeting we had to submit changes to our constitution and by-laws which had been adopted five years previous. Dr. C. C. Stephenson was elected President, and Dr. Morgan Smith, Secretary. In 1908 we met in Little Rock again. These were the only two consecutive meetings that have been held in any town since 1890, and I do not know whether ever before or not. At this meeting Dr. J. T. Clegg of Siloam Springs was elected President, Dr. Morgan Smith re-elected Seeretary. The illustrious Jno. A. Wyeth of New York was our distinguished visitor. In 1909 we met in Pine Bluff, and at this meeting we had an evening session to which the public was invited and which was devoted to "The Protection and Care of Tuberculosis." Just previous to this our Tuberculosis Sanitorium had been opened for the reception of patients. At this meeting Dr. J. H. Lenow was elected President, Dr. Morgan Smith re-elected Secretary. In passing, I will say that Dr. Lenow is probably the only member living who was a charter member of the organization in 1875. In 1910 we met in Little Rock and had as a visitor the immortal Joseph Price of Philadelphia who gave us a very interesting lecture and held some instructive clinics. Dr. R. C. Dorr of Batesville was elected President, Dr. Morgan Smith re-elected Secretary.

In 1911 we met in Fort Smith and at this meeting our several examining boards were discussed and condemned; but so far we have not been able to change this condition. The law creating these boards was passed by the legislature of 1903. Dr. Morgan Smith was elected President, Dr. C. P. Meriwether, Secretary. In 1912 we met in Hot Springs and at this meeting had as a distinguished visitor, Isidore Dyer, of New Orleans. At this meeting we were given an automobile ride, in contrast to the carriage ride given us in 1901, at which time there was not an auto in Hot Springs, nor in the State. Dr. E. R. Dibrell was elected President, Dr. C. P. Meriwether re-elected Secretary. In 1913 we met in Little Rock and at this meeting we were given a reception at the home of Dr. Frank Vinsonhaler. Dr. F. B. Young, then of Springdale, was elected President, Dr. Meriwether re-eleeted Secretary.

In 1914 we met in El Dorado and were given a reception and dance at the Elks Hall. Dr. St. Cloud Cooper was elected President and Dr. Meriwether re-elected Secretary. In 1915 we met in Little Rock, our place of meeting being the old Presbyterian chureh at Fifth

and Scott Streets, which has since been torn down. Dr. J. C. Wallis of Arkadelphia was elected President and Dr. Meriwether re-elected Secretary. In 1916 we met in Texarkana and at this meeting were given a reception and noonday lunch at the Cotton Belt Hospital and auto ride to the creosoting works on the Texas side. Dr. M. L. Norwood of Lockesburg was elected President and Dr. Meriwether, Secretary. In 1917 we met in Little Rock and our session was largely devoted to the discussion of war conditions, our government having gone to war just a few weeks before our meeting. Dr. William Breathwit of Pine Bluff was elected President and Dr. Meriwether, re-elected Secretary. In 1918 we met in Jonesboro and here we had distinguished visitors from the Army, also Major General Blue of the U. S. Public Health Department. They proposed a plan for supplying the army with the much-needed doctors, which plan was accepted by our Society, and as a result many of our members were soon in training camps. We were entertained by a delightful trip on special train to Lake City where a sumptuous fish barbecue was served. Dr. E. F. Ellis of Fayetteville was elected President and Dr. Meriwether re-elected Secretary. In 1919 we met in Little Rock, and this was a meeting of rejoicing that the war was over, and that none of our doctors had lost their lives in the conflict. Dr. Geo. S. Brown of Conway was elected President and Dr. Meriwether re-elected Secretary.

This brings us to the meeting of 1920 in Eureka Springs where we were told that we could tickle the feet of the angels from the highest peaks around the city, or give cooling draughts to the condemned in Hades from the deepest gulches between the mountains. Some of you might have indulged in both of these pastimes, but I was denied the pleasure of fingering the angels' toes, and saved the horror of administering to the condemned of the other world. I did enjoy the entertainments, consisting of prize fights, automobile rides over the mountain roads, swimming in Spring Lake, and so on. At that meeting our beloved Meriwether was missed from our ranks, and his office was filled by Dr. William R. Bathurst, of Little Rock. The well-known faces of L. P. Gibson, C. M. Lutterloh and several others were sadly missed from our ranks, which forcibly reminds us that our numbers are rapidly changing—the old leaders dropping out, and young men coming up to take their places. This is the twenty-fifth consecutive meeting I have had the pleasure of attending, and during this period the personnel is almost wholly changed. Of the twenty-seven presidents I have mentioned, one-third of them are dead. All the Secretaries have served till the Presidency has relieved them, or death has taken them away. Fortunately but one has died while holding the office.

As your President I had hoped that our medical laws would be changed, especially as to the several board plan, and we had every assurance that the bill combining the three boards into one would have passed, had not the unfortunate criticism of Judge Wade occurred, which threw the General Assembly into a pandemonium, leaving the last few days of the session a blank, so far as ridding the calendar of many important bills that were ready for passage.

Among the needed reforms I refer to our hoped for bill Senate No. 139, House No. 319. While visiting the Legislature in the interest of this bill I was in company and counsel with our efficient Secretary, and so nice was he to me, that I thought much of just quitting Black Rock and taking up my permanent abode with him; but there was one serious objection to this—I did not get an invitation.

In conclusion I wish to say that I have been a member of the Lawrence County Medical Society since April, 1897, and during this period I have never failed to be present and try to cover the subject assigned me, when I was on the program, either in County, District or State Societies. It seems to me the biggest failure I have made is attempting to deliver the annual address as President of the Arkansas Medical Society. There is not much work in the office of President, yet the position should require a man to have true generalship, especially when a law is to be passed by the Arkansas Legislature. In this I have signally failed.

The following was taken from the Arkansas Medical Journal of April, 1896: "It is better to wear out than rust out, Medical Societies, properly conducted are wonderful rust preventatives to the average doctor." Also the following poem from the same Journal, which seemed to have been clipped from a Ft. Smith paper, commenting on the coming meeting of the Arkansas Medical Society:

"We have boiled our hydrant water;
We have sterilized the milk;
We have strained the prowling microbe
Through the finest kind of silk.
We have bought and we've borrowed
Every patent health device,
And at last the doctors tell us
That we've got to boil our ice!"

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The advertising policy ol this Journal is governed by the rules ol the Council on Pharmacy and Chemistry ol the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items ol general interest to the prolession are invited from all over the state. Notice of deaths, removals from the state, changes ol location, etc., are requested.

Editorials.

ANNUAL ADDRESS OF OUR PRESIDENT.

Dr. G. A. Warren of Black Rock, retiring President of the Arkansas Medical Society, made a new departure and a most interesting innovation in his annual address delivered at the Hot Springs meeting.

It will be found printed complete in the front section of this issue. It presents a synopsis of the history of the Society since its organization in Little Rock in 1875, and to acquire the correct data must have demanded much time and research. Such a history, in the nature of things, would be attempted only after the lapse of many years; otherwise, if given in years too close together, repetition would cease to interest. We are not sure that any President previously had undertaken such a task and coming now after forty-six years of progress, such data is of great value as well as interest.

One survivor alone remains of the charter members, namely, Dr. J. H. Lenow, still actively engaged in practice, but there are other members of very long standing and to all such this calling back of the past cannot but have evoked pleasing reminiscences and memories—and some sad ones too, in the memory of those who form the growing list of those who have taken "the last journey." Dr. Warren unduly disparages his efforts near the close of his address in saying that delivering it he felt to be his greatest failure. On the contrary, he gave the meeting a surprise and pleasure with possibly little thought of the time and trouble the preparation of it cost him. If this be failure, we wonder what the good doctor would call success.

Abstracts.

THE CLINICAL APPROACH TO SYPHILIS, WITH SUGGESTIONS FOR ITS REVIVAL AND DEVELOPMENT.

By John H. Stokes, A. B., M. D.

(Archives of Dermatology and Syphilology, Vol. 2, No. 4, October, 1920.)

The first requirement for the development of proficient clinical service is a proficient syphilographer. His success must be measured by his ability to secure the co-operation of his colleagues. He must inspire them to contribute their diagnostic acumen to the study of some particular aspect of the disease. He must be able to check up the results of individual, diagnostic, therapeutic, and research procedures against the knowledge of the disease as a result of such experience. There is the necessity of the diagnostic instinct and finally, the ability to master data.

One of the most serious difficulties to overcome in creating ideal clinical syphilology is the tendency of clinicians to fall into routine ways and "unconsciously carry in their minds a few syphilological *ipse dixits.*" An ideal syphilologist must have discernment and must not rely entirely on the more or less established *ipse dixits.* Another difficulty is the naturalness of subjectivism. Great effort should be made to overcome impressionism which is liable to creep in most unconsciously.

In time it is to be hoped that the field of syphilology will be able to obtain an estimate of the prognosis of syphilis very much in the same way as Dreyer obtains an estimate of the prognosis in tuberculosis.

With all the other demands made for development, the importance of records cannot be overlooked. An ideal record system for syphilis must contain definite information in terms and time and quantity on the following points:

1. Negative as well as positive findings.

2. The personal resistance of the patient to infection and evidence of individual peculiarities in the course of the disease.

3. Data from which to infer on definite knowledge in regard to the strain and peculiarities of the infecting organism.

4. The duration of the disease.

5. The type, duration, and intensity of treatment.

VENEREAL DISEASES—PHYSICIAN'S RESPONSIBILITY FOR THEIR CONTROL.

By Millard Knowlton, M. D.

(Modern Medicine, Vol. III, No. 1, January, 1921.)

The venereal diseases are for the physicians alone. Osteopaths, chiropractors, and Christian Scientists are constrained to withdraw from the field. This adds a greater responsibility to the medical man. He must in the first place be thorough. Carelessness impresses the patient unfavorably and he loses faith in the medical profession. If the medical profession is to maintain its prestige and the confidence of the public it must be able to meet the increasing demands of an enlightened public.

Remembering that each uncured case of venereal disease is dangerous to the public, the physician must either undertake to give the best possible treatment or refer him to a physician who will. It is within the physician's power and his responsibility to see that proper treatment is given to all sufferers, regardless of race, color, or social position. Most patients can afford to pay a reasonable fee, and for those in an infectious stage who cannot, the boards of health provide arsphenamine free. It is up to the physician to be big-hearted enough to see that the drug is properly administered.

In rural states, it is proposed that the medical men of each community confer and select one man who is willing to make a specialization of the study of venereal diseases. This man, who thus qualifies himself should be selected to treat the indigent patients. This plan would be advantageous to the medical profession and to the public.

It is the duty of the medical men to prevent spread of venereal diseases by the proper treatment of the existing cases. For the best results, united and co-operative efforts for encouraging specialization are required.

Personals and News Items.

Dr. C. P. Sisco has moved from Osage to Springdale.

Dr. J. G. Mitchell of El Dorado has returned from New York where he attended the eye, ear, nose and throat clinics.

Dr. L. V. Parmley, recently of the U. S. Navy, has moved to Little Rock with office in the new Exchange Bank Building.

Dr. W. M. Matthews, of Crossett, has removed to Little Rock and opened an office in the Boyle Building.

The Cooper Clinics, Fort Smith, announce the addition to their staff of Dr. Manford R. Waltz, whose practice pertains to diseases of the eye, ear, nose and throat.

The Martin Clinic of Hot Springs, founded by the late Dr. E. H. Martin, will be continued by his associates with Dr. E. A. Purdum chief of staff.

Dr. L. O. Weldon, U. S. P. H. S., Washington, D. C., who was stationed in Little Rock in 1918, succeeding Dr. L. C. Pierce, has returned to Little Rock and has taken charge of the newly authorized Public Health Service Hospital at Fort Roots.

It took Ehrlich 606 experiments to discover a way to give a man arsenic enough to kill syphilis germs in his blood without running the risk of killing him. He called the result 6-0-6 or "salvarsan." In this country the United States Government supervises its production through the Hygienic Laboratory of the Public Health Service and calls it arsphenamine.

The July issue of the *Medical Review of Reviews* will contain a lengthy original contribution by Mme. Curie entitled "The Radio Elements and their application." It is, we

believe, the first and only contribution which this noted scientist has made to an American publication and is extremely valuable. A copy of the July issue containing it will be sent gratis to any physician making the request.

Address the Medical Review of Reviews, 51 East 59th Street, New York.

Cancer, probably the most dreaded of all diseases, is on the increase in America and throughout the world in spite of the fact that it is curable if treated early, says the U. S. Public Health Service. In its death toll in the United States cancer already ranks among tuberculosis, pneumonia, heart disease and diseases of the kidney, and it is much more feared than any of these. This is because of the ignorance of the public, the difficulty of detecting cancer in its early stages and the fact that when it has reached the recognizable stage it has gone beyond the curable stage.

The medical world today believes that work for the control of cancer should be largely similar to that so successfully caried on in tuberculosis; that is, it should consist mainly in widespread education of the general public to recognize cancer in its precancerous state, it should train the people at the first alarm to seek the advice of a competent physician, and it should keep the public freely advised of the latest scientific knowledge concerning cancer, its causes, prevention and cure.

BUREAU OF VITAL STATISTICS.

Arkansas State Board of Health
Little Rock, Ark.

It is important that a child's birth be recorded:—

To establish identity and nationality.

To prove legitimacy.

To show when a child has the right to enter or leave school.

To show when the child has the right to seek employment.

To establish the right of inheritance of property.

To prove liability to or exemption from military duty.

To establish the right to vote.

To qualify to hold title to, and to buy and sell real estate.

To prove the age at which the marriage contract may be entered into.

To establish the right to passports for foreign travel and return.

To prove the mother's right to a widow's pension.

To make possible statistical studies of health conditions.

It is the duty of the physician or midwife attending at a birth to file a certificate of that birth with the Local Registrar of the township in which it occurs within ten days thereafter. Every mother should see that her doctor files a report of her baby's birth.

The registration of births is the foundation on which rests the enforcement of compulsory education and child labor laws. Laws regulating the age of consent can not be rigidly enforced so long as the age of the girl depends on the statements of interested persons rather than on official records. In fact, *there is hardly a relation in life from the cradle to the grave in which such records may not prove of the greatest value.*

Death registration is equally important:—

To secure complete and accurate information as to deaths of all human beings, with dates of deaths and causes, so that preventable causes of deaths may be eliminated and lives lengthened.

That the various public health agencies—national, state and municipal—may know the number of deaths that occur and thereby may operate wisely.

That epidemic diseases may be detected promptly and handled efficiently.

That homeseekers and outside capital may be guided in the selection of safe and healthful localities by accurate information rather than misstatement of interested persons.

That life insurance companies may be enabled to intelligently engage in movements to protect their policy holders from deaths and suffering due to preventable diseases and accidents, and to promptly settle claims.

That the settlement of estates and matters of inheritance, pensions, etc., may be definite-

ly settled by official records instead of by the memory of interested witnesses.

Death certificates are filed by the undertaker who handles the dead body, or the *person so acting*, and no burial permit shall be issued until death certificate has beeen filed after it has been properly signed by the last attending physician.

NOTICE—Failure to comply with this law subjects one to a penalty of fine and imprisonment.

Tekarkin.—Many physicians have received a sixteen page pamphlet, "Therapeutic Leaves." "Therapeutic Leaves" purports to be a periodical, published as "a medium for the dissemination of knowledge pertaining to therapeusis." Actually it is an advertising medium dealing with the products of the National Bio-Chemical Laboratory "Osmo-Calcic Solution," "Tekarkin" and "Osmotic Mangano-Potassic solution." These three preparations are said to be the formulas of Edward Percy Robinson, who lives in Mount Vernon, N. Y., and has an office in New York City. They are used by Dr. Robinson in the treatment of cancer. A package containing about 65 minims of Tekarkin and one ounce each of the other preparations sells for ten dollars. Most of the material in "Therapeutic Leaves" is a rehash of four papers published by Edward Percy Robinson in the New York Medical Record. In these Robinson advanced the theory that cancer is caused by an excess of sodium chlorid in the blood and tissues, and that it can be cured by administering a solution of potassium nitrate. However, "Homemade solutions," says Dr. Robinson, "are apt to be disappointing," and hence a solution of this chemical is sold as Tekarkin. This dilute potassium nitrate solution sells at the rate of sixty-seven dollars an ounce. At one time Dr. Robinson specialized in "facial contouring." Except for the articles that have been published in the Medical Record, literature does not indicate that Edward Percy Robinson can lay claim to special knowledge of or skill in the treatment of cancer (*Jour. A. M. A.*, May 28, 1921; p. 1514).

CONSTITUTION AND BY-LAWS

OF THE

ARKANSAS MEDICAL SOCIETY.

1921.

CONSTITUTION.

Article I.—Name of the Society.

The name and title of this organization shall be the Arkansas Medical Society.

Article II.—Purposes of the Society.

The purposes of this Society shall be to federate and bring into one compact organization the entire medical profession of the State of Arkansas and to unite with similar societies of other States to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education, and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of State medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

Article III.—Component Societies.

Component Societies shall consist of those county medical societies which hold charters from this Society.

Article IV.—Composition of the Society.

Section 1. This Society shall consist of members, delegates and guests.

Sec. 2. Members. The members of this Society shall be the members of the component county medical societies.

Sec. 3. Delegates. Delegates shall be those members who are elected in accordance with this Constitution and By-Laws to represent their respective component societies in the House of Delegates of this Society.

Sec. 4. Guests. Any distinguished physician not a resident of this State, who is a member of his own State Society, may become a guest during any Annual Session on invitation of the officers of this Society, and shall be accorded the privilege of participat-

ing in all of the scientific work for that Session.

ARTICLE V.—HOUSE OF DELEGATES.

The House of Delegates shall be the legislative body of the Society, and shall consist of: (1) Delegates elected by the component county societies; (2) the Councilors; and (3) *ex-officio,* the President and Secretary of this Society.

ARTICLE VI.—COUNCIL.

The Council shall consist of the Councilors, and the President and Secretary, *ex-officio.* Besides its duties mentioned in the By-Laws, it shall constitute the Finance Committee of the House of Delegates. Six Councilors shall constitute a quorum.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES.

The House of Delegates may provide for a division of the scientific work of the Society into appropriate sections, and for the organizations of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

ARTICLE VIII.—SESSIONS AND MEETINGS.

SECTION 1. The Society shall hold an Annual Session, during which there shall be held daily general meetings, which shall be open to all registered members and guests.

SEC. 2. The time and place for holding each annual session shall be fixed by the House of Delegates.

ARTICLE IX.—OFFICERS.

SECTION 1. The officers of this Society shall be a President, three Vice Presidents, a Secretary, a Treasurer and ten Councilors.

SEC. 2. The officers, except the Councilors, shall be elected annually. The terms of the Councilors shall be for two years, those first elected serving one and two years, as may be arranged, so that after the first year five Councilors shall be elected annually to serve two years. All these officers shall serve until their successors are elected and installed.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES.

In order to broaden professional fellowship this Society is ready to arrange with other State Medical Societies for an interchange of certificates of membership, so that members moving from one State to another may avoid the formality of re-election.

ARTICLE XI.—FUNDS AND EXPENSES.

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall be fixed by the House of Delegates, but shall not exceed the sum of $3.00 per capita per annum, except on four-fifths vote of the Delegates present. Funds may also be raised by voluntary contributions, from the Society's publications and in any other manner approved by the House of Delegates. Funds may be appropriated by the House of Delegates to defray the expenses of the Society for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must be referred to the Finance Committee before action is taken thereon.

ARTICLE XII.—REFERENDUM.

SECTION 1. A General Meeting of the Society may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates and when so ordered the House of Delegates shall submit such question to the members of the Society, who may vote by mail or in person, and, if the members voting shall comprise a majority of all the members of the Society a majority of such vote shall determine the question and be binding on the House of Delegates.

SEC. 2. The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL.

The Society shall have a common seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the

previous Annual Session, and that it shall have been published twice during the year in the bulletin or journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

BY-LAWS.

Chapter I.—Membership.

Section 1. The name of a physician on the properly certified roster of members of a component society which has paid its annual assessment, shall be *prima facie* evidence of membership in this Society.

Sec. 2. Any person who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Society, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3. Each member in attendance at the Annual Session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an Annual Session until he has complied with the provisions of this section.

Chapter II.—Annual and Special Sessions of the Society.

Section 1. The Society shall hold an annual session at such time and place as has been fixed by the House of Delegates at the preceding annual session.

Sec. 2. Special meetings of either the Society or of the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

Chapter III.—General Meetings.

Section 1. All registered members may attend and participate in the proceedings and discussions of the General Meetings and of the Sections. The General Meetings shall be presided over by the President or by one of the Vice Presidents, and before them shall be heard the address of the President and the orations, and such scientific papers and discussions as may be arranged for in the program.

Sec. 2. The General Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

Chapter IV.—House of Delegates.

Section 1. The House of Delegates shall meet on the first day of the Annual Session. It may adjourn from time to time as may be necessary to complete its business; provided, that its hours shall conflict as little as possible with the General Meetings. The order of business shall be arranged as a separate section of the program.

Sec. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every twenty-five members, and one for each major fraction thereof, provided that its annual report and assessments are in the hands of the Secretary thirty days prior to the annual meeting. Every component society, however, regardless of its number of members, which has complied with this Section, is entitled to one delegate.

Sec. 3. A majority of the Delegates registered shall constitute a quorum.

Sec. 4 It shall, through its officers, Council and otherwise, give diligent attention to and foster the scientific work and spirit of the Society, and shall constantly study and strive to make each Annual Session a stepping-stone to future ones of higher interest.

Sec. 5. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein it is dependent on the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Sec. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to

adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until every physician in every county of the State who is reputable and eligible has been brought under medical society influence.

Sec. 7. It shall encourage post-graduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

Sec. 8. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

Sec. 9. It shall divide the State into Councilor Districts, specifying what counties each district shall include, and, when the best interest of the Society and profession will be promoted thereby, organize in each a district medical society, and all members of component county societies shall be members in such district societies.

Sec. 10. It shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

Sec. 11. It shall approve all memorials and resolutions issued in the name of the Society before they shall become effective.

Chapter V.—Election of Officers.

Section 1. The House of Delegates on the first day of the annual session shall select a Committee on Nominations, consisting of ten delegates, no two of whom shall be from the same Councilor District. It shall be the duty of this committee to consult with the members of the Society and to hold one or more meetings at which the best interests of the Society and of the profession of the State for the ensuing year shall be carefully considered. The committee shall report the result of its deliberations to the House of Delegates in the shape of a ticket containing the names of three members for the office of President and of one member for each of the other offices to be filled at that annual session. No two candidates for President shall be named from the same county.

Sec. 2. All elections shall be by ballot, except where there is only one candidate, when election may be made by acclamation, and a majority of the votes cast shall be necessary to elect.

Sec. 3. The report of the Nominating Committee shall be the first order of business of the House of Delegates on the afternoon of the last day of the General Session.

Sec. 4. The election of officers shall be the second order of business of the House of Delegates on the afternoon of the last day of the General Session.

Sec. 5. Any person known to have solicited votes for or sought any office within the gift of this Society shall be ineligible for any office for two years. No member shall be eligible to any office of this Society who is not in attendance at the meeting at which the election is held.

Chapter VI.—Duties of Officers.

Section 1. The President shall preside at all meetings of the Society and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and, as far as practicable, shall visit, by appointment, the various sections of the State and assist the Counsilors in building up the county societies, and in making their work more practical and useful.

Sec. 2. The Vice Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Council shall select one of the Vice Presidents to succeed him.

Sec. 3. The Treasurer shall give bond in the sum of $3,000. He shall demand and receive all funds due the Society, together with bequests and donations. He shall pay money out of the Treasury only on a written order

of the President, countersigned by the Secretary; he shall subject his accounts to such examination as the House of Delegates may order, and he shall annually render an account of his doings and of the state of the funds in his hands.

Sec. 4. The Secretary shall give bond in the sum of $3,000; he shall attend the General Meetings of the Society and the meetings of the House of Delegates, and shall keep minutes of their respective proceedings in separate record books. He shall be *ex-officio* Secretary of the Council. He shall be custodian of all record books and papers belonging to the Society, except such as properly belong to the Treasurer, and shall keep account of and promptly turn over to the Treasurer all funds of the Society which come into his hands. He shall provide for the registration of the members and delegates at the annual session. He shall, with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners in the State by counties, noting on each his status in relation to his county society, and, on request, shall transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Society. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committees of their appointment and duties. He shall employ such assistants as may be ordered by the House of Delegates, and shall make an annual report to the House of Delegates. He shall supply all component societies with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment, collect the same and turn it over to the Treasurer, taking his receipt therefor. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the House of Delegates.

Sec. 5. The Council shall have authority to accept or reject all bonds.

Chapter VII.—Council.

Section 1. The Council shall meet on the first day of the annual session and daily during the session and at such other times as necessity may require, subject to the call of the chairman or on a petition of three Councilors. It shall meet on the last day of the annual session of the Society to organize and outline the work for the ensuing year. It shall select a chairman and a clerk, who, in the absence of the Secretary of the Society, shall keep a record of its proceedings. It shall, through its chairman, make an annual written report to the House of Delegates.

Sec. 2. Each Councilor shall be organizer, peacemaker and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual written report of his work, and of the condition of the profession of each county in his district at the annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed on a properly itemized statement; but this shall not be construed to include his expenses in attending the Annual Session of the Society.

Sec. 3. The Council shall be the Board of Censors of the Society. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Society. All questions of an ethical nature brought before the House of Delegates or the General Meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members or component societies, on which an appeal is taken from the decision of an individual Councilor.

Sec. 4. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

Sec. 5. The Council shall provide for and superintend the publication and distribution

of all proceedings, transactions and memoirs of the Society, and shall have authority to appoint an editor and such assistants as it deems necessary. All money received by the Council and its agents, resulting from the discharge of the duties assigned to them, must be paid to the Treasurer of the Society. It shall annually audit the accounts of the Treasurer and Secretary and other agents of this Society and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Society during the year, and the amount of all other property belonging to the Society under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office of the Secretary or of the Treasurer, the Council shall fill the vacancy until the next annual election.

Sec. 6. In case of a vacancy in the office of delegate, the Council shall have authority to seat any member of that county society in attendance at said meeting as delegate, with full right to perform all the duties of that office.

Chapter VIII.—Committees.

Section 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Health and Public Instruction.

A Committee on Medical Legislation.

A Committee on Scientific Exhibits.

A Committee on Arrangements.

Such committees shall be appointed by the President unless otherwise provided, so that the term of office of one member shall expire every year.

Also to make provision for the permanent filling of all vacancies that may occur through the death, resignation or removal of any member.

Sec. 2. The Committee on Scientific Work shall consist of three members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers and discussions shall be presented.

Sec. 3. The Committee on Health and Public Instruction shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Association in securing and enforcing legislation in the interest of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislaiton so as to secure the best results for the whole people, and shall strive to organize professional influence so as to promote the general good of the community in local, State and national affairs and elections.

Sec. 4. The Committee on Arrangements shall be appointed by the component society of the county in which the annual session is to be held. It shall provide suitable accommodations for the meeting places of the Society and of the House of Delegates, and of their respective committees, and shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

Chapter IX.—County Societies.

Section 1. All county societies now in affiliation with this Society or those which may hereafter be organized in this State, which have adopted prineiples of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Society.

Sec. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

Sec. 3. Charters shall be issued only on approval of the Council, and shall be signed by the President and Secretary of this Society. Upon the recommendation of the Council the House of Delegates may revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Sec. 4. Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures and concessions shall be made, with the aid of the Council or for the District if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Sec. 5. Each county society shall judge of the qualifications of its own members; but, as such societies are the only portals to this Society and to the American Medical Association, every reputable and legally registered physician and who does not practice or claim to practice, nor lend his support to any exclusive system of medicine, shall be eligible to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

Sec. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

Sec. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts; but in case of every appeal, both as a Board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 8. When a member in good standing in a component society moves to another county in this State, his name, on request, shall be transferred without cost to the roster of the county society into whose jurisdiction he moves, and this request must be made within twelve months after his removal.

Sec. 9. A physician living near a county line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

Sec. 10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Sec. 11. At some meeting in advance of the Annual Session of this Society, each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Society, in the proportion of one delegate to each twenty-five members, and one for each major fraction thereof, and the Secretary of the Society shall send a list of such delegates to the Secretary of this Society at least ten days before the Annual Session.

Sec. 12. The Secretary of each component society shall keep a roster of its members, and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in his State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall endeavor to account for every physician who has lived in the county during the year.

Sec. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and list of non-affiliated physicians of the county, to the Secretary of this Society on January 1, and not later than March 1 of each year.

Sec. 14. Any county society which fails to pay its assessment, or make the report required, on or before March 1, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Society or of the House of Delegates until such requirements have been met.

Chapter X.—Miscellaneous.

Section 1. No address or paper before the Society, except those of the President and orators, shall occupy more than twenty minutes in its delivery, and no member shall speak longer than five minutes nor more than once on any subject, except by unanimous consent.

Sec. 2. All papers read before the Society or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when read.

Sec. 3. The deliberations of this Society shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 4. The Principles of Medical Ethics promulgated by the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

Chapter XI.—Amendments.

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates present at any Annual Session, provided that such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published twice during the year in the bulletin or journal of this Society, or sent officially to each component society at least two months before the meeting at which final action is to be taken.

Obituary.

DR. LEVI D. CRAWFORD.—Dr. Levi D. Crawford, of Marked Tree, died at Drakesboro, Ky., April 6, 1921, after a short illness. Member Craighead County Medical Society. Aged 62.

DR. JOHN W. PATTON.—Dr. John W. Patton, of Morrilton, died May 11, 1921. Aged 53. Dr. Patton had been in declining health for a year and a half.

County Societies.

CONWAY COUNTY.

(Reported by H. E. Mobley, Sec.)

The regular meeting of the Conway County Medical Society was held in the Public Library in Morrilton, April 19, 1921, at 2 p. m.

Meeting called to order by Dr. B. C. Logan, President. Minutes read and approved. Dr. Holloway of Center Ridge was elected to membership. We are making an effort to secure all the new members possible and have been very successful.

Dr. Robert Caldwell of Little Rock, Councilor for this District, was present and made a very interesting talk on the functions of the medical societies. He also reported a number of interesting cases.

Dr. Jackson, of Center Ridge, presented a case of "Glaucoma" and Dr. Caldwell conducted a very interesting clinic on this case. He accompanied this clinic with a short and interesting lecture on the eye.

Present: Logan, Jones, Mobley, Bradley, Bruce, Matthews, Holloway, and Goatcher.

Dr. Patton, of Morrilton, who until this year has been an active member of this society, was a visitor at this meeting. Dr. Patton had been in bad health and confined to his home most of the time for the past eighteen months. This was the first meeting that he had attended since he became ill, and incidentally it was the last meeting that he ever attended, as his death occurred before the next regular meeting.

Book Reviews.

Handbook of Therapy.—By Oliver T. Osborne, Professor of Therapeutics, Yale University Medical School, and Morris Fishbein, Assistant to the Editor, Journal of the American Medical Association. Sixth Edition, 1920. Published by the American Medical Association, 535 North Dearborn St., Chicago.

The object of this book is to suggest to the physician an up-to-date treatment for the diseases considered. It includes not only *dry* therapy, but everything that has to do with the treatment of disease. Every doctor should have a copy.

The Story of the American Red Cross in Italy. —By Charles M. Bakewell. Published by The MacMillan Company, New York, 1920. Illustrated. Price, $2.00 net.

This book tells to the American people who contributed so generously to the Red Cross funds the simple tale of what their dollars did in Italy. It is a great and inspiring record and one which Americans may well take pride. This little book tells not only of the establishment of relief centers, work house, traveling canteens, "asili' for the children and large hospitals, but also of the building of entire cities for the accommodation of refugees from the Piave and from Venice.

CHARLES H. CARGILE, M.D., F.A.C.S.
Bentonville.
President of the Arkansas Medical Society, 1921-1922.

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PROCEEDINGS

OF THE

FORTY-FIFTH ANNUAL MEETING

OF THE

Arkansas Medical Society

Hot Springs, Ark., May 3, 4, 5, 1921.

HOUSE OF DELEGATES.

FIRST DAY.

Tuesday, May 3, 1921.

The House of Delegates was called to order by the President, Dr. G. A. Warren, at 9:45 o'clock, a. m.

Invocation by Rev. C. E. Hieock, pastor of the Presbyterian Church.

Almighty God, our Heavenly Father, we bow before Thee this morning as the One and the only One entitled to our worship. We bow before Thee as the all-powerful One, without whose help we can accomplish but little here in life. We bow before Thee as the giver of all good and perfect gifts. At the opening of this convention we come to Thee to invoke Thy presence and Thy blessing. Thou hast stored up Thy treasures through all the earth. Thou hast given unto these men the skill and wisdom and training to use Thy gifts for suffering humanity. Their lives are consecrated unto a high and holy purpose. O, God! come and bless them as Thy servants, and so guide them in all their deliberations, so lead them by thine own power and goodness that, in their ministrations, they may carry out Thy work, Thy plan and Thy purpose. O, Father! do Thou give unto these men that skill of the Lord Jesus Christ, as he ministered among men, as he freely gave himself that He might alleviate the ills of humanity, that they may carry into their work not only the skill, the training and the learning, but may they carry that sweet, gentle spirit that cometh from Thyself, and, with it all, do Thou forgive us our sins, for we are but fallible. O do Thou lead each man here unto Thyself. We ask it in the name and for the sake of Him who alleviated us and gave Himself for us. Amen!

President Warren: Next on the program is an Address of Welcome for the city of Hot Springs. It is my pleasure to introduce to you Mr. George Belding, Secretary of the Business Men's League, of Hot Springs.

ADDRESS OF WELCOME FOR THE CITY.

Mr. George R. Belding:

Mr. President and Gentlemen of the Convention:

I offer myself this morning as a very poor substitute, as Mr. Nutt was expected to deliver this Address of Welcome, as President of the Business Men's League. But, on an occasion of this kind, Mr. Nutt wanted some facts and figures presented, as he considers this assemblage most important, and its bearing on the city of Hot Springs one that is extraordinary. I will say that the stage setting is most perfect for a delightful convention. The weather is beautiful. Your faces are all smiling, and I am sure you are happy. The only thing that I see missing is the numbers. I regret very much that we haven't a better representation, but I am sure they will be here later

That reminds me of a little story I heard on optimism the other day. When we consider the trials and tribulations, the vicissitudes and hardships that we passed through, it is really astonishing that we have a convention at all. We are just now going through that reconstruction period after the war where we are feeling the pinch. We didn't feel it before. We were all living in luxury during the war, and, I am afraid, fell into habits of extravagance that it will take us a long time to live over. But, from now on we will really feel that we have had a war. When you realize the prices of all commodities that prevail at the present moment, and the condition of all the communities in Arkansas, the prices of lumber, cotton, and grain, and the idle workmen, the shops and factories closed down, it is really surprising to me that we will have a crowd here at all. So that reminds me again of a story on optimism. And, I am sure that the physicians of Arkansas, realizing

the great part that they played in the war, and the bravery that they showed all along the line, and the many sufferings that they went through, and the assistance that they gave, not only with their help and their assistance, but their money, will appreciate this story. And, it is very appropriate at this particular time, just after the big flood in Arkansas. Just at flood time, when the waters were the highest, there was an old man whose entire property had been swept away, with the exception of his little cabin, and the waters were roaring and rushing by, just up to the eaves of the house. He was sitting on top of the roof. One of his neighbors, about a quarter of a mile away, who was fortunate enough to own a skiff, came floating by, and he halloaed and said: "Hello, Sam." He said, "Good morning, Zeke." "Why," he said, "all of your fowl have been washed away, haven't they?" "Yes," he says, "but the ducks can swim. They will take care of themselves." He was smoking an old clay pipe. He looked very happy and contented. "Well," he said, "your fruit trees have been washed way, haven't they?" "Yes, but," he says, "I am told they were not going to have no crop anyway, so that don't make any difference." "Well," he said, "what are you going to do with this water? It's way up above your windows." He took another puff at his pipe, and he said, "Well, the windows needed washing, anyhow." So, I call that optimism. (Laughter.) And, I believe that we ought to look at it in that light, viewing the condition of Arkansas at the present time. I am sure it will all work out, if we will just be patient.

We are particularly interested in you gentlemen, and I am here to extend you a welcome, first, because you are from Arkansas. I just returned from a long trip to Greensboro, N. C., where in company with the President of the Business Men's League, we attended the great Bankhead Highway Convention. He and I, upon our return, agreed that we felt prouder of Arkansas and her citizenship every time we left home to attend one of those conventions. We heard, on the floor of that great convention, Arkansas and her citizenship defended of the vicious attacks that have been recently made upon her through the columns of the New York Times. We noticed particularly the way they handled conventions, and the courtesies that were extended, and compared them with those of Arkansas, and the various peoples that we met, we compared to the people of Arkansas. And, I want to go on record this morning as saying that we have a great State and have a citizenship equal to any State in the United States, and I am proud of you, (applause) proud to have you here today. We are particularly interested in you, secondly, because you belong to the profession that you do. You are physicians. You are the first person that we look in the face when we enter the world, and you are the last that we see when we leave this world. You are placed here either for good or for evil. The physician who is really a lover of his profession, and understands his profession, is one of the greatest attributes of God's creation. He scatters sunshine wherever he goes. He is constantly doing good. But the man who is trusted with this great mission on earth, who does not understand it, is as dangerous as a stick of dynamite, and can bring about great evil. But, that is almost past and gone, because the profession has been brought down to a scientific basis, where that condition exists no longer.

We are particularly interested in you, as physicians, because of the relationship of the physicians, particularly of Arkansas, which should be very closely allied with the city of Hot Springs. We think that we have one of nature's great wonder secrets revealed. We are no longer a little struggling village, but we are now dignified with the name of a national park. We belong, as one of the units, to that great system of national parks. So, Hot Springs belongs to you just as much as it does to us, and you should be just as much interested in Hot Springs as we are.

It has frequently been called the "show-case of Arkansas." Many people are attracted to Hot Springs from various parts of the United States, and, as a matter of fact, from all parts of the civilized world. And, from this point they radiate all over the State making big investments. I can stand here and call many instances where millions of dollars have been placed upon the tax books through the visits of people to the city of Hot Springs.

We believe that Hot Springs is peculiarly a city unto itself. We think it is a great benefit to suffering humanity. Now, it has been charged by some people that a physician never sends a person to Hot Springs. That is not true. Some of the very best friends that Hot Springs has are among the physicians of the United States, and, particularly, those of the State of Arkansas. I daresay that many of you who are here in attendance on this convention will at some future time be practicing medicine in the city of Hot Springs. Therefore, I want you to become accustomed to preaching the doctrine as we preach it, so that you will know your lesson when you come here to practice medicine. (Laughter.)

Now, we claim for the city of Hot Springs many things. It has never been demonstrated, by an analysis of this water, that it contains any chemical of any character. But, we do claim, through an examination of these waters by Prof. Boldwood, of Yale University, who was sent here by the Interior Department of the United States Government, that it contains radio gases, and we preach this doctrine, and those of you who haven't read his report, I want you to know the claim we make for Hot Springs this morning. And, it is very appropriate just at this particular time, as Mme. Curie, the discoverer of radium, will be in the United States next month. And, by the way, we have sent a very pressing invitation, through the Governor of the State of Arkansas, and through the Interior Department, to have Mme. Curie visit Hot Springs.

"Since the discovery of the wonderful element Radium and the demonstration of its powers of imparting its activity and potency to contiguous substances and its display of the forces—Heat, Electricity and Light—in various peculiar forms of chemico-actinic force, and a capability of increasing as well as destroying vital activities, the suggestion naturally followed that the wonderful curative properties of these celebrated springs would, upon examination and investigation, be found to be due to the presence of radium or its emanations in some form of radio-activity. Responding to this suggestion, the Interior Department of the United States Government, having direct management and control of the United States Reservation at this place, employed the world-renowned authority on radium, Prof. Bertram B. Boldwood, of Yale College, to make exhaustive tests of these springs for this element, and, in summing up an abstract of his wonderful report on the completion of his work, the Department states the conclusions by Prof. Boldwood are:

"'The waters of the Arkansas Hot Springs are radio-active to a marked degree. The radio-activity of the waters is due to dissolved radium emanation (a gas).'

"The chief effect of the radiations from radium and its disintegration products is to produce an ionization of the atoms of whatever substance the rays penetrate. Chemical effects follow as a secondary result of the ionization. Von Noorden and Falta say that, in contradistinction to all other forms of electro-therapy, we possess in the radio-active sub-

stances a means of carrying electrical energy into depths of the body, and there subjecting the juices, protoplasm and nuclei of the cells to an immediate bombardment by explosions of electrical atoms. We may therefore, designate this internal treatment with radio-active waters as internal electro-therapy.

"The consensus of expert opinion as to the value of radium springs therapeutically is that they primarily stimulate cell activity, arousing all secretory and excretory organs, stimulating the eliminating processes, thereby causing the system to throw off waste products; that they are the agent for the destruction of bacteria, and, by their radiations, they have positive influence on diseased tissues, exercising germicidal powers."

That is the doctrine that we preach for the Hot Springs water. We may be wrong, but we think we are right. We have expert opinions on it. And, those are the opinions that we want to bring before you today, and try to make you a real convert of Hot Springs, because it no longer belongs to the citizenship of Hot Springs. Hot Springs belongs to the State of Arkansas; it belongs to the Nation. And, the silent multitude that leaves here daily, monthly and annually, throwing away their crutches, I think, speaks wonderfully for one of the great mysteries of the world. That is the best proof that we can possibly find, those that leave here, that have been suffering, and those that come to visit Hot Springs on the recommendation of those who have been here.

Now, it is useless, my good friends, to say that you are welcome to this city. We have, in the profession, I think, some of the most wonderful physicians of the United States. It is true that some of the old ones who have lived here have passed to their reward. Younger men are taking their places. But, the future of Hot Springs is in the keeping of the physician, and the wonderful curative powers of these waters must be preached, and the doctrine must be preached by the physicians to the world at large. The laymen can not do it. The layman can not make the ordinary person believe the truth about these waters. And, we absolutely place that trust in the hands of the physicians, with the hope that that trust will be kept up by the physicians who take the places of the old ones. I remember Dr. Greenaway, Dr. Garnett, Dr. Vaughan, all of those old physicians who have passed out and gone; but, they have left worthy successors. And, as I said a moment ago, perhaps some of you gentlemen will move to Hot Springs and take their places.

We want to impress upon you this morning that we want the most cordial relationship to exist between the city of Hot Springs and the physicians of the State of Arkansas. And, I am making that plea to you this morning, and assure you that there is not only a most cordial welcome for you on this occasion, but, each and every time that you visit Hot Springs, individually, or when you bring your family, we shall do everything within your power to make your visit a most pleasant one, and truly a valuable one to you. We will do everything we can to make this convention go down in history as one of the greatest conventions that you have had during the lifetime of your orgauization. We look forward to this coming fall, when we shall enjoy the visit of that great body, the Southern Medical Association, and we sincerely trust that it will be a really representative body, and that a great many delegates will be present, because this is one occasion when we are going to put forth our very best efforts to show Hot Springs up to great advantage.

President Warren: We truly enjoyed Mr. Belding's address of welcome. I will state to him that this body whom he welcomed here is only the representative body of the Arkansas Medical Society, or the law-making body, the House of Delegates, and the keeping up of the government of our society rests upon them. We will now listen to the address of welcome by our friend, Dr. Deaderick.

ADDRESS OF WELCOME FOR THE PHYSICIANS OF HOT SPRINGS.

Dr. W. H. Deaderick:

Mr. President and Gentlemen of the House of Delegates:

When Hot Springs was last honored with a visit from the Arkansas Medical Society, there rested on us a stigma so heavy we could not raise our heads, look you in the eye and extend a clean right hand of welcome. The sick you sent us were often sold to the highest bidder and even those of us not guilty met you in an humble spirit of apology.

This is not the case today. We have cleaned house and can bid you a manly, professional welcome to the new-born Hot Springs, recently christened by Congress the Hot Springs National Park.

During the first week in September, 1916, three local physicians and an attorney had a conference with the object of planning for the eradication of the drumming evil. This committee was voluntary and self-appointed. The first step was to raise the funds with which to conduct the campaign. The program contemplated enlisting the services of a prominent detective agency, employing men to approach physicians with the proposition to split the fee, furnishing the human material posing as patients, providing these patients with money for the fee to be split between doctor and drummer and with maintenance while in the service of the committee, and the employment of legal aid. These extensive plans necessitated considerable money.

It was determined by the committee that the plans should not be divulged to any one, even to the contributors to the fund, since success demanded the greatest secrecy.

When the local members of the profession were called on for contributions they invariably reminded the committee of unsuccessful campaigns in the past against the drummers, totalling in expense well over one hundred thousand dollars. However, notwithstanding the outcome of former plans, and entire ignorance of the details of that under way, each one contributed liberally, asked no questions, and, in a few days, the sum of three thousand dollars was raised.

Within a very short time a Wm. J. Burns detective, provided with a dictagraph, was in the city. The instrument was installed in a room in an office building where the drummers frequently met and freely discussed their traffic. At the receiver were the detective and a stenographer. The dictagraph record covered nearly thirty-six typewritten pages. While it gave leads which were effectually worked out, its chief value lay in forcing confessions before the Grand Jury. The instrument was finally discovered by the drummers, but none knew how long it had been in place and none knew what evidence had been obtained, so, when facing the Grand Jury, it was decided the best policy was to tell the truth.

The discovery of the dictagraph created a sudden desire to furnish the committee much valuable evidence against others, the confessor hoping, thereby, to obtain immunity for himself. Its discovery pre-

cipitated also a sudden desire for a more congenial clime and several such have not been heard of since.

In a number of cases positive evidence was gotten through friendly hotel drummers who willingly turned State's evidence, taking patients to disreputable doctors and obtaining half the fee.

The fight had barely started when it was evident that the drummers were also solidly orgauized. The members of the committee were closely shadowed and it is probable that all its meetings were at least known to the drummers. Their bread and meat were at stake, and it is believed that they spent considerable money to annihilate the accumulating evideuce. Numerous threats of bodily harm were received by the committee but the only casualty listed was a few bruises upon the person of the committee's attorney at the hands of one of the drumming doctors.

One of the committee's strongest witnesses was forcibly abducted by the drummers and taken to New Orleans. He was soon located and secreted in a charity hospital of that city, and later kept under guard in a logging camp in Eastern Arkansas nutil needed in court.

Shortly before the Grand Jury was to take up the cases, about 150 subpoenas were issued, 132 being turned into the sheriff's office on October 2, about four weeks after the campaign started. This was another occasion for an exodus of crooks.

The cases were set for the Grand Jury investigation on October 10 and 11, and on October 9 Circuit Judge Wood delivered a special charge to the Grand Jury, which document marks an epoch in the history of this city.

Judge Wood said in part:

"It is well known that there are a good many hotel men that have been in that business here not for the legitimate gain that might be derived from conducting a hotel and providing for the comfort of the guests, but they are in the business merely for the money they can make out of it by trafficking in these sick people, taking them to the highest bidder. That is what they are in business for, some of them, just for the money they can get out of selling these sick people. I don't believe that any well informed person will deny that that proposition, along with some of the other evils that we have had here, has been sucking the life ont of this town for years. Now, that is the reason, gentlemen of the jury, that I want to lay special emphasis on this thing. I don't want any of you gentlemen to go into it in a half-hearted, faint-hearted sort of way, thinking that you are wasting your time, because, looking at it from the material point of view, the material prosperity of the town, there is hardly anything that could be of more importance than a close investigation of that thing at this time. Of course, your investigation now, regardless of what you do, will not be a permanent eure; we have just got to keep fighting it all of the time. But you have an opportunity now and such an opportunity as has not been presented before in the history of this town to get into it. The most pitiable part of the whole system to me is that some of the physicians that are giving up to these drummers, paying them for selling them sick people, are forced to it. They start out with high professional ambitions, college education, and they are professional in every way; they open up a business here with high hopes and ambitions, and they intend to live according to the ethics of the profession aud the law of the land; but these men that are in that business tell them that if they don't pay them for the patients at their hotels they won't get them."

On October 24 eighteen true bills of indictment were returned in connection with the anti-drumming probe and on November 15 twelve were issued. Of these thirty were indicted, twenty-nine plead guilty and accepted penalties varying in degree up to leaving the State permanently. In only one instance did the case go to trial. He was convicted, and appealed to the Governor for a pardon, which was deuied. His sentences was suspended during his residence out of the State.

The next net results accrued on December 21, when nine physicians were stricken from the registered list by the Department of the Interior, and thirteen hotels were denied the right to house guests taking the baths.

Thus was broken the backbone of the traffic in the sick and afflicted. Many others had seen the handwriting on the wall, and had left. The few remaining offenders were frightened into good behavior.

The campaign was, of course, novel in its magnitude, for nowhere on earth did the occasion or the opportunity for such conditions exist. Its success is attested by the high standard of ethics of the local profession during the past four years. It is probably incontrovertible that Hot Springs now has as clean a medical profession as exists anywhere today. Like the Assyrian Phoenix, the profession fouled its nest; but, when it gained sufficient strength, it lifted its nest from the tree and deposited it in the Temple of the Sun.

President Warren: We will now have the responses to the addresses of welcome by Dr. M. L. Norwood, on behalf of the House of Delegates.

RESPONSE TO THE ADDRESSES OF WELCOME.

Dr. M. L. Norwood:

Mr. President, Ladies and Gentlemen:

We have listened to your words of welcome with pleasure. For a great many years your city has been well advertised as a convention city. Your central location, ample hotel accommodations and wonderful baths, have induced religious, scientific, political and "booster" assemblies to hold their meetings here. In fact, if I remember correctly, this society likes it so well that this is the fifth meeting here.

It is proper and becoming of the members of this society to meet in the greatest health resort on the continent, and thereby show the world that we Arkansans duly appreciate the advantages of this city.

We have been well received by every class of citizens. This display of hospitality has caused us much delight. Indeed, you have convinced us that the Golden Orchard of Hesperides was but a gilded dream compared to the glorious reality of the grandeur and beauty that greets the eye of the stranger on his first entrance into your city.

Time was when Hot Springs was the Mecca of the sporting world; when saloons, gambling houses, crooked doctors and horse-racing prevailed. Thank God! the saloons and gambling houses have been banished forever. Thanks to the local profession and organized medicine, the crooked doctors are gone; if still living, to some unknown postoffice; if dead, to Hades.

As for horse-racing, I cannot but regret its discontinuance. For I never saw a red-blooded man or woman that was not thrilled by this sport of the kings as well as of the common people. Since I can no longer see a real race, I get hungry for them and have to content myself by reading Gen. Wallace's description of the chariot race in his wonderful book, "Ben Hur: The Tale of Christ."

Since you have eliminated the crooked doctors and their drummers, this city is "a land of pure delight,

where 'doctors' in glory stand, where everlasting day excludes the night, and waters banish pain. Here everlasting springs abide, and never-withering flowers.''

Last summer an acquaintance of mine named Bob moved to Hot Springs. He remained here until November, when he moved back home and secured a job as a ''jitney'' driver. One day while driving me, I asked him why he left Hot Springs. He says, ''Two reasons, Doc, two reasons. First, I got sick from drinking too much hot water. I sent for Dr. J. He came and gave me some medicine. I got worse. Then I sent for Dr. W., and he came and gave me some more medicine. I got heap worse. Then, I sent for Dr. L. E. He didn't come. He saved my life. The second reason why I left was, as long as I was driving a touring car, it was all right, but, when winter came they put me to driving a sedan, then I resigned, because you know, Doc, when a tobacco-chewing son-of-a-gun like me gets him a job, it must be one where he can spit frequent and free.''

All doctors like Hot Springs; most of them like hot water, quite a few like a ''hot time,'' etc. So, if the entertainment committee have any spirited horse races, or lively boxing matches in view, do not hesitate to offer them.

Now, as I have said, we have enjoyed your words of welcome, and, when all of these meetings shall be merged into that one great meeting that awaits all good doctors and their families, I think that one word that will gladden our hearts on our arrival at that City of Joy and Peace, will still be as it is here, this blessed word ''Welcome.''

When we shall reach that mystic creek
That flows along the shores of Time;
And no more words remain to speak,
And no more thoughts to put in rhyme.

When we shall hear the summons sweet,
Which means the end of earthly things,
Our last fond wish will be to meet
The friends we met in dear Hot Springs.

President Warren: The next in order being the appointment of the Credentials Committee, I will appoint on that committee Dr. R. H. T. Mann, Chairman, Dr. L. Kirby and Dr. C. J. Mareh.

The House of Delegates will take a recess for five minutes pending the report of the Credentials Committee.

REPORT OF CREDENTIALS COMMITTEE.

Dr. R. H. T. Mann:

We, the Committee on Credentials, wish to report that we have examined the list of delegates in the hands of the Secretary, and find that those so listed are entitled to represent their county societies at this meeting.

On motion of Dr. Caldwell, seconded by Dr. Stidham, report was adopted.

The roll was here called and a quorum was found to be present.

President Warren: The next in order is the reading of the minutes of the Eureka Springs meeting of the Forty-fourth Annual Session. Shall we have them read?

Dr. L. Kirby: I move that we adopt the minutes as published in the Journal.

Seconded. Carried.

President Warren: The next in order is the appointment of the Reference Committee. I will appoint as members of the Reference Committee Dr. J. G. Eberle, Chairman, Dr. Thomas Douglass and Dr. C. H. Cargile.

The next order of business being the President's Address to the House of Delegates, Dr. Thad Cothern, Third Vice President, occupied the chair.

PRESIDENT'S ADDRESS TO HOUSE OF DELEGATES.

Dr. G. A. Warren:

I didn't prepare for you any set address. This business before you to be transacted is the necessary business of our organization, and there are coming up for consideration several proposed changes in our laws; one in the Constitution, and several in the By-Laws. I would request that you especially make yourselves familiar with these various changes that are proposed in the Constitution and By-Laws, and inform yourselves as to whether their adoption would be a detriment or a change for the better. We have had, as many of you know, from time to time changes in our Constitution and By-Laws. When I joined the society we had a Constitution and By-Laws which was particularly our own. No other organization had anything to do with it. No other organization could suggest to us any changes or any conformities to other organization. That was our Constitution and By-Laws before 1902, or, I will say, before 1903. In 1902 we had a uniform code on Constitution and By-Laws submitted to us by the American Medical Association, which was adopted in 1903. Since that time for five years following 1903, we had a complete change in our Coustitution and By-Laws, an almost complete change from what we had previously adopted. It is well for us to learn the salient points of our Constitution and By-Laws, and keep informed on them. Of course, there are some vital changes that ought to be made; but, I think the fewer the changes that we make in our Constitution and By-Laws, the better it will be. So, as I said to you in the beginning, we should inform ourselves as to these proposed changes, one in the Constitution and several in the By-Laws. The change in the Constitution has reference to our yearly dues. To change that we must have a vote of four-fifths of the delegates present. That is the only case where a vote of four-fifths of the House of Delegates is required, where a change in the Constitution is proposed. This change proposed is Article III, where it is proposed to change the dues from $2.50 to $3.00.

Now, we have in the By-Laws, Chapter V, Section 1, that ''the House of Delegates shall meet on the first day of the annual session.'' We have a similar change proposed with reference to the Council. Then, we have a proposed change in Chapter VI, Section 3, providing that the Treasurer shall give bond in the sum of $6,000.00, being an increase from $3,000.00. That is for you to consider, too. Personally, I see no good reason for increasing the Treasurer's bond, unless you feel that he may be entrusted with more

money; but it seems to me that a $3,000.00 bond would be sufficient for any one whom we elect to that position.

Then, we have Chapter VII, Section 1, with reference to the Council. Chapter VIII, Section 1, it is proposed to change to read "Committee on Health and Public Instruction," instead of "Committee on Public Policy and Legislation." In addition it is proposed to provide for a Committee on Medical Legislation, and also institute another committee, a Committee on Scientific Exhibit.

Another proposed change is in Chapter VIII, Section 1, the fifth paragraph to read, "Such committees shall be appointed by the President, unless otherwise provided, so that the term of office of one member shall expire every year." Now this is a change that I really think is very important. I think we ought to adopt it. All of these committees shall consist of three members, and their term of office to expire one a year. For instance, the committees that are appointed this year, one member will be appointed for one year, one for two years and one for three. That is, with reference to the important committees. And, that provides for a standing majority of the committee, which has had experience in the year before. I think that is a wise change. There is another proposed change in this chapter, "Also to make provision for the permanent filling of all vacancies that may occur through the death, resignation or removal of any member," of such committee.

Another proposed change is in Chapter VIII, Section 2, the seventh line to read, "On or before March 1 of each year," instead of "thirty days prior to the annual meeting."

Now, that is another point about which there is really a question. Last year we had our meeting in June, the first one held that late since I can remember. But, usually, we have our meetings in May, and that would mean that our program would have to be completed and published sixty days before our meeting. That is another point on which I question the advisability. Take that into consideration and act on it as you think best for the Society. I have been on the Program Committee a few times, and there has never been a time when the program could be completed really in thirty days before our annual meeting. I am not going to say that it should not be; but I am going to say that it has not been done, and I question whether we are going to be able to do that in the future. There might be many papers that we want on our program that we couldn't get, if the program is completed by March 1.

Now, there are other things of importance that the House of Delegates has to consider, and one is the selection of your officers. There are five Councilors to be selected, and four members on the State Medical Board. The councilors are selected according to councilor districts. The members of the Medical Board are selected according to Congressional districts. The representatives from the various councilor districts and Congressional districts will get together and select the names of those whom they want to fill these positions.

I want to say now, and, that is my understanding and it is, in a measure, constitutional, that it is not to the best interests of the Society to select men who are not in attendance on this meeting. We should not select any men or any of the important elective officers who are not present at this meeting. While I do not believe that positions ought to be given to those who attend the meetings of the Society for the purpose of being elevated to positions of trust and honor, yet I do believe that these posittions ought to be given to those who regularly attend, and that no man ought to be considered for any position within the gift of this House of Delegates who is not present at this session. Last year we elected at Eureka Springs a member for Treasurer who was not present, and it was unconstitutional, and we had to continue the old Treasurer. It may seem unfair and embarrassing to the man who was elected for the old Treasurer to hold over, but it was right; it was constitutional. There wasn't anything else to be done, and, therefore, we held over Dr. Saxon, who had been elected Treasurer by the Council, and he is today the Treasurer, and his successor is to be elected at this meeting. I feel that any of these offices of honor and trust should be filled by the men who attend, and especially those who are in attendance today at this meeting. I would suggest that the matter of selection or of making recommendations be deferred until, say, the second day—until tomorrow—and then you will have had all of those or almost all of those who are coming here to have arrived by that time, on the train that comes in about 9:40 or 10:00 o'clock in the morning. I should say that all will have arrived by then.

The selection of the President is an honorary one, and he hasn't very much to do; but it is a very important position and he should be a man of some generalship, especially when he goes before the Legislature on behalf of laws to be enacted. It does not matter how many you consider, the personnel of this Society cannot all be honored by the position of President. In thirty years only thirty men could fill that position, and a generation will have come and gone in thirty years, so that you must act as to the best interests of the Society, and not consider the man.

Vice President Cothern: The President's Address will be referred to the Reference Committee.

President Warren: The next order will be the reports of the various committees. The Committee on Scientifie Program, Dr. J. T. Jelks of Hot Springs.

REPORT OF COMMITTEE ON SCIENTIFIC PROGRAM.

Your Committee on Scientific Program, wish to submit the printed program we have prepared, a copy of which will be delivered to each member as he registers.

Some additions and alterations were unavoidable, and corrections may be found on sheet attached to the third page of cover.

The paper of Dr. Phipps, of Roe, should have been included in the correction. We have tried to confiue the scientific session to as few papers as possible and sincerely hope that the profit and pleasure of the meeting will be enhanced by full and free discussion of every essay.

J. T. Jelks, *Chairman*,
J. H. Stidham,
Wm. R. Bathurst,
Committee.

Adopted.

President Warren: The next in order is the report of the Committee on Medieal Legislation.

REPORT OF COMMITTEE ON MEDICAL LEGISLATION.

We, your Committee on Medical Legislation beg to report as follows:

Considerable effort was made toward gettiug the profession of our State interested in an effort to get

a one-board measure adopted by the last General Assembly. We were successful in part; but were handicapped in not having early sufficient, uniform data to get all asking for the same thing. We are glad to say that practically all of our members called upon for any particular duties responded promptly to whatever appeal was made.

You are familiar with the measure as first introduced in the General Assembly and as later amended. It was on the calendar and was "special order" with more than enough pledged votes for its passage, when the unfortunate Wade matter came up and caused everything else to be cast aside.

Our campaign in behalf of this measure was waged on as dignified and honorable plane as we could gauge. The members of this committee worked both together and individually, as we each saw fit to act.

From the experience just gone through we would like to suggest that the fight be continued; that the doctors individually and collectively, interest themselves more in their county and district politics, to the end that a better type of man be sent as their representative, both in the House and Senate.

'T is an old axiom that the initiative for all reforms, to be successful, must come from the lowest or bottom strata. If that be true, we should wage a campaign of education for the laity to the end that they be enabled to see the need of, and ask for, remedial legislation to protect themselves from the pseudo healers.

In my opinion it would be well to employ some able and experienced attorney to act as legal adviser of our State Society, in order that he may properly acquaint himself with our legal needs and the better organize our forces for future campaigns in Public Health matters.

Respectfully submitted,
THAD COTHERN, *Chairman,*
C. S. PETTUS,
W. F. SMITH.
Committee.

Dr. Caldwell: I move its adoption.

Seconded.

Dr. J. G. Eberle: I suggest that we thank the committee for their efficient labors. They were very successful. They made a very fine fight, as I understand.

Dr. Caldwell: I accept that as a part of the motion.

Adopted.

Dr. C. H. Cargile: There has been some mention made in the papers, and I have heard something of a bill named the Draper Bill, or something of that sort. I talked to Dr. Clegg, who was our representative, and he told me he didn't know the nature of the bill. He was out when they finally voted on it, and he couldn't give me any information about it. I wrote to our Secretary and told him that some of us, especially in the remote parts of the State, were using their best efforts to know what was going on at the Legislature, and suggested that that bill be published for our information, and he gave a good reason for deferring it. He said he believed that later it would be published, possibly; he didn't know. And, there would be some comment on it later. There was nothing said about that bill. I understand it is not the bill they asked for. I understood that all the while. Some of us would like to, or, I know I would like to hear something of the bill or the nature of it, and the discussion of it.

Secretary Bathurst: I think I can answer Dr. Cargile's question, by stating that the bill didn't pass, and the Arkansas Medical Society had nothing to do with it; absolutely nothing.

Mr. Cargile: I am glad to hear it.

Dr. R. H. T. Mann: I want to make a motion, if I am in order, that the Council of the Arkansas Medical Society be empowered to employ an attorney.

Secretary Bathurst: That comes under Miscellaneous Business.

President Warren: The next is the report of the Committee on Necrology.

Secretary Bathurst: It is customary to have the report of the Committee on Necrology during the Memorial Session, and the time is set for Wednesday morning at 9:30.

Dr. Thad Cothern: I move that the committee's report be deferred until the Memorial Session.

Seconded. Carried.

President Warren: The next is the report of the Committee on Cancer Research, Dr. E. E. Barlow, chairman.

REPORT OF COMMITTEE ON CANCER RESEARCH.

Your committee feels that arousing the interest of both the profession and the laity in the subject of Prevention of Cancer is still its main function.

We find that delay on the part of both physician and laity is still the greatest stumbling block in handling the cancer problem. We have nothing new from laboratory developments relative to the actual cause of cancer during the past year. We believe it is time for a universal campaign of education to be carried on throughout the State, and, in this work, we must appeal to the physicians, and, through them, to the various medical organizations and the State Boards of Health.

In reviewing Dr. Bloodgood's report from the Surgical Clinic of the Johns Hopkins Hospital, we find that in those cases in which, previous to operation, a clinical diagnosis of cancer could not be made, the proportion of cures five years after radical operation was 80 per cent. In these cases to which the diagnosis of cancer could be made clinically from retracted nipple or adherent skin, the proportion of cures after five years was only 25 per cent.

These statistics are very significant—showing a difference in favor of the early operation before diagnosis could be made of 55 per cent.

After reviewing the statistical reports of the country, we are led to believe that there still occurs 100,000 deaths from cancer annually in the United

States, and that the death rate from maliguant disease is increasing at the rate of 2½ per cent a year.

In the face of all this, during the past year, we have personally seen several cases of extremely suspicious growth in which physicians of otherwise good standing in the profession have advised the waiting and watching policy. So long as this condition prevails, we cannot help but feel that physicians are, in a great way, responsible. Ou the other hand, we see several cases each year of inoperable cancer of the uterus in women past the menopause who had been having hemorrhages for a year or more before consulting any physician. These same women, had they had even a suspicion of appendicitis, would have consulted a surgeon very early. The physicians themselves have finally become educated on appendicitis, and through them, the laity has become educated. Whether or not it requires any longer to educate the profession on cancer than it did on appendicitis, we are uuable to say, but we sometimes think it is takiug longer.

It has been wisely stated that if the laity knew all that the laity should know of cancer, and if the medical profession were all educated to the latest knowledge, at least forty per cent of the death rate would be preventable. Not many years ago, the medical profession taught the diagnosis of cancer only after it was an uncontrollable disease. Today, they teach diagnosis of cancer in its localized and controllable stages.

That cancer is nearly always somthing else before it is cancer, and that radical treatment, instituted at this time, will greatly reduce the mortality, has been abundantly proven in different sections where there has been an intensive educational campaign carried on directly to the laity.

There is only one class of cases that is cured with radium and remains cured and that is the superficial epithelioma of the skin. These basal-cell epitheliomas recover also with the x-ray and with ''pastes.'' The number of cures has not been materially increased by the use of radium and x-ray. Whether the life of the average patient has been materially prolonged remains an open question. We know positively that cases of both sarcoma and carcinoma which have been running a relative benign course so far as the patient's comfort in life is concerned, when disturbed in an operative way, or by x-ray treatment, seem to undergo a malignant metamorphosis and rapidly and cruelly terminate life.

We wish to emphasize the fact that 39 per cent of the cancer mortality belongs to the stomach and liver. We consider these figures very significant, as indicating that too many cases which have reached the cancer age and have obscure digestive symptoms are not being submitted to early exploratory operation. These are especially the cases where early operation is the only possible hope. Cancer of the liver, as it appears in the death certificate, is nearly always secondary to cancer elsewhere in the gastro-intestinal tract. Consequently, at some stage, it was amenable to surgical treatment.

As reported by Peck, out of 527 cases of cancer of the stomach admitted to the various New York hospitals during the past six years, only 98 were amenable to any sort of radical operation, and even of these but very few offered any hope of permanent cure because of the disease being far advanced. He further states that in the light of present day knowledge, to wait for the classical clinical symptoms of the disease, such as tumor, coffee-ground vomit, hematemesis, anemia and cachexia, would be utterly inexcusable, and like waiting for abscess or peritouitis to establish a diagnosis of appendicitis.

Your committee recommends that this society have appointed a permanent committee for a term of three to five years; that the duties of this committee be: (1) To collect all available information possible on the cause and prevention of cancer; (2) To work in conjunction with the State Board of Health and the American Society for the Control of Cancer; to institute a State-wide educational campaign which shall extend to physicians and laity. That this committee, either alone or in conjunction with the State Board of Health and the American Society for the Control of Cancer, collect and have printed and distributed throughout the State, both to physicians and laity, suitable leaflets or pamphlets with proper instructions about the early recognition of pre-cancerous conditions. That this committee, in conjunction with the officers of the State Medical Association, extend this campaign directly to the County Medical Societies of this State, furnishing them information and asking for at least one meeting a year to be devoted to the subject of education in its own county or district, selecting those in each society most desirable to present the subject, in connection with municipal health boards, to women's organizations, church organizations, benevolent societies, etc. That information, suited to the laity be furnished to the public press and its co-operation solicited.

Respectfully submitted,

E. E. Barlow, *Chairman*,
J. P. Sheppard,
Wm. R. Bathurst,
Committee.

Adopted.

President Warren: The next in order is the report of the Committee on Infant Welfare. The chairman of that committee is not here. I want to say here that this is very important. There were a great many bills introduced in the Arkansas Legislature with reference to infant welfare. There was not one, but many. There were three introdueed, and several more that were written or gotten up. Whether they were introduced or not, I don't know. I didn't keep in touch with them, but I was there a good deal looking after our Medical Board law. These proposed bills had reference to child illegitimacy, and I urged our committee to go down there and get behind those measures, and try to combine them into one, and do something. I don't believe that there was anything more important that was proposed to our last Legislature than legislation providing for illegitimate children. Now, many States have taken aetion in this regard. A ehild cannot help its illegitimacy, and it ought to be proteeted as much as the laws of our eommonwealth ean proteet it. There were some very good bills proposed, but what beeome of them, I don't know. I didn't follow that up, but there was several of them, and I urged our eommittee to go down there and get behind some of these measures and combine them and work it out. Now, I want to say that two years from now that Committee on Infant Welfare could get

together and get behind some of these institutions, that are really aiming to do something for the woman, and see if we can't get a law in Arkansas with reference to the protecting of illegitimate children.

There was a child in our county, whose father was a physician. And, he took this boy, gave him his name, acknowledged him as his son, set him up in business and educated him. And, yet, he died without a will, and he was a man with a good deal of property. They went into court, and the boy found out that he had absolutely no right to hold that property. Distant relatives, as far removed as second cousins and nieces, and so on, came in and took that property away from that boy, who had been his father's associate in business. That is not just one case; there are others. And it ought to be corrected by the Legislature. I think we ought to put ourselves on record, and we ought to take action, and a year from now appoint a committee that will try to do something.

The next thing in order is the report of the Committee on Workmen's Compensation and Social Insurance, Dr. C. J. March, Chairman.

REPORT OF THE COMMITTEE ON WORKMEN'S COMPENSATION AND SOCIAL INSURANCE.

In view of the fact that this State has no statutory, or uniform method of determining the amount and awarding same, this committee would respectfully recommend that the Legislative Committee of the Arkansas Medical Society be directed to prepare a bill dealing with this question, for introduction into the Legislation of 1923.

As to Social Insurance, your committee is of the opinion, judging from the results of such legislation in England and other countries, that such a course in this country would be calamitous, both to the public and to the profession.

Respectfully submitted,

C. J. March, *Chairman*
O. E. Jones,
J. M. Lemons,
Committee.

Adopted.

President Warren: The next is the report of the Committee on Hospitals.

Dr. S. J. Hesterly: I was up to see Dr. Pettus about two or three weeks ago, and he formulated a report and sent me a copy of it, and I looked it over and returned it. I suppose he would like to be here to read it.

Secretary Bathurst: I move that this be deferred until tomorrow.

Seconded. Carried.

President Warren: The next is the report of the Committee on Entertainment, Dr. G. E. Tarkington.

Dr. W. T. Wootton: I believe that Dr. Bathurst and Dr. Tarkington had arranged to euchre me out of the chairmanship, but I am going to make a report anyhow. For your convenience, we are endeavoring to arrange to have all meetings under this one roof. As for entertaining the men, that is a matter that has been deferred a number of years ago. We are going to entertain all of the women that are in attendance. We trust that you will see that the women all attend the luncheon tomorrow. If they wish to go out on the drive at any time from 6:00 in the morning until 8:00 at night, make known their wishes. If it is shopping, sight-seeing, and visiting, there will be someone here to go with them. Wednesday night will be the reception and ball to the President in this room. We want all of the men to attend, and, if you haven't your wife with you, we will furnish you a lady. We have got a few bath houses here. If there is anybody who wants to take a bath while over here, make it known by giving your name at the desk of any bath house in town, and you will be furnished complimentary baths as long as you are here, from 6:00 in the morning until 5:00 in the afternoon. One a day is sufficient. (Laughter.)

President Warren: The next is the report of the Council.

Dr. R. C. Caldwell: I have here a report from each Councilor District of the members in each society in each county. I am sorry to say, in tabulating up this report, that I find that this year we have only 1,031 members out of 2,560 doctors in Arkansas. Last year there were 1,140. The year before last there were 1,076 against 1,031 now. I am sorry to say that we have had councilors visit other societies than their own seven times only. To the councilors, you might say, is the task of trying to help build up the county societies of the State, and I feel one of our duties is to attend the meetings of county societies other than our own and try to build up a greater membership than we have. I would like to urge on all members of the Council to take upon themselves the duty of going out to two, three, or four other societies each time and see if they can not stimulate

a greater membership in the Arkansas Medical Society.

REPORT OF THE COUNCIL.

A meeting of the Council of the Arkansas Medieal Society was held in the Arlington Hotel, Hot Springs, May 4, 1921.

Called to order at 1:30 by Robert Caldwell, Chairman.

Present: Caldwell, Stidham, Lemons, Smith, Wootton and Kirby.

The reports of the Committee of Audit of the books and accounts of the Seeretary and Treasurer were approved.

The report of the Auditing Committee reeommending that the Secretary be authorized to issue warrants for fifty dollars per month in payment for eaeh month for stenographic services was, on motion, approved.

On motion, the Council voted to appropriate the sum of $300.00 to the Committee on Health and Publie Instruction.

The traveling expenses of Counеilors during the year while visiting county soeieties were approved, as follows:

Dr. Stidham, $16.50.

Dr. Don Smith, $7.72.

On motion honorarium of $1,000.00 was allowed the Secretary and editor of the Journal during the year.

The Secretary was also authorized to pay the contingent expenses of the annual meeting, 1921.

The recommendation of the Auditing Committee that the Secretary be authorized to pay $600.00 for clerical and stenographic services for the fiscal year 1920-1921, was approved.

On motion, the following resolution was unanimously adopted:

Be It Resolved, The publication of the Journal being entirely in the hands of the Council, we are unanimously of the opinion that Dr. Bathurst is deserving of our congratulations and sincere expression of appreciation for his industry and zeal, and for the results achieved.

Furthermore, we must not overlook the increased earnings from our advertising pages. The colleetions from this source amounting to $2,807.83. The marked increase in membership is also very gratifying.

On motion the meeting adjourned at 1:55 p. m.

ROBERT CALDWELL, *Chairman.*

Attest: LEONIDAS KIRBY, *Secretary.*

REPORT OF AUDITING COMMITTEE.

We, your Committee on Secretary and Treasurer's books for the past year find the same to be as reported by them.

We find that they have on hand $8,170.96.

We, your eommittee further approve the aecount rendered by the Secretary for clerical and stenographic expenses, amounting to $600.00, and recommend that the Secretary of the Arkansas Medical Society be authorized to pay the stenographic expenses at the rate of fifty dollars per month; and further recommend that the Seeretary be authorized to pay the incidental expenses of this the Hot Springs meeting.

LEONIDAS KIRBY,
J. M. LEMONS,
J. H. STIDHAM,
Committee.

Adopted.

President Warren: We will now have the Secretary's report.

REPORT OF THE SECRETARY.

To the House of Delegates of the Arkansas Medical Society:

Gentlemen—It is with some pride and gratification that I have the honor to report that the Arkansas Medical Society is now eomposed of sixty-three eomponent eounties, only twelve counties have no regularly organized representation, namely: Cross, Sharp, Cleburne, Montgomery, Stone, Van Buren, Izard, Fulton, Marion, Pike, Newton, Poinsett.

MEMBERSHIP.

At the Juue session of last year our membership was 1,057; at the close of the year it numbered 1,140, the largest number ever enrolled by this society. The paid membership for 1921 to date is 1,031, my report being made over a month earlier than that of last year.

By the end of the year we confidently expeet to exceed all previous reeords. The co-operation of every member is earnestly solicited for gaining ethieal recruits.

During the year death has robbed us of eleven members, and we have lost twenty-one by removal from the State. Total deductions, 32. To offset this reduction we have so far secured sixty-nine new members.

Our financial eondition at date of this report is as follows:

Cash on hand at the close of last annual session		$ 8,479.23
Received for annual dues	$2,751.25	
Rec'd for interest on deposits: Treasurer's account	136.16	
Reeeived for subseriptions and advertising in the Journal	2,807.83	$ 5,695.24
		$ 14,174.47
Current expenses, as per itemized statement attached		6,003.51
Balance on hand at date of this report, May 2, 1921		$ 8,170.96

The Secretary is indebted to the Council, the County Secretaries and the Co-Operative Medical Advertising Bureau for many courtesies and much valuable assistance in the building and holding together of this select body of professional gentlemen.

Respectfully submitted,
WILLIAM R. BATHURST.

ANNUAL REPORT OF TREASURER OF THE ARKANSAS MEDICAL SOCIETY FOR THE FISCAL YEAR ENDING APRIL 30, 1921.

Cash on hand from last year	$8,479.23
Interest received on savings aeeount	136.16
	$8,615.39
Vouehers eaneelled, Nos. 62 to 80, incl.	6,003.51
Balance on hand at date of this report	$2,611.88

Respeetfully submitted,
R. L. SAXON.

On motion of Dr. Cothern the report was referred to the Council.

President Warren: Now comes the selection of the Nominating Committee. I suggest at the noon hour the members of the

different Councilor Districts get together and select their Nominating Committee and report tomorrow.

Secretary Bathurst: This should be done on the first day.

President Warren: At the General Session?

Secretary Bathurst: It should be done right now.

President Warren: We have to do it now, unless there is a motion to defer.

Dr. W. T. Wootton: I move this be deferred until the last business of the morning.

Dr. E. E. Barlow: A point of order. It can't be done.

President Warren: He said as the last business of the morning. There is not anything unconstitutional about selecting the State Board of Examiners later on. That is usually done the first day, but we can do that tomorrow.

Dr. Wootton: Is that brought in by the Nominating Committee?

President Warren: No.

Secretary: That is left entirely to the members of the Congressional Districts.

President Warren: I suggested that we do that tomorrow. The Nominating Committee must make their nominations now. That is done by the Councilor Districts. If there is no further business just now, we will take a recess of five or ten minutes and let the different members of the Nominating Committee assemble.

(A recess was here taken.)

The following were selected as the Nominating Committee by the delegates from the respective Councilor Districts:

Personnel of Nominating Committee.

First Councilor District—Dr. J. H. Stidham, of Hope.

Second Councilor District—Dr. A. L. Best, of Newport.

Third Councilor District—Dr. G. W. Reagan, of Clarendon.

Fourth Councilor District—Dr. J. M. Lemons, of Pine Bluff.

Fifth Councilor District—Dr. C. J. March, of Fordyce.

Sixth Councilor District—Dr. M. L. Norwood, of Lockesburg.

Seventh Councilor District—Dr. G. E. Tarkington, of Hot Springs.

Eighth Councilor District—Dr. J. B. Dooley, of Little Rock.

Ninth Councilor District—Dr. J. H. Fowler of Harrison.

Tenth Councilor District—Dr. J. G. Eberle, of Fort Smith.

President Warren: What is your wish as to the selection of the Examining Board?

Dr. Cothern: I move that the selection of the Examining Board be deferred until tomorrow.

Seconded. Carried.

President Warren: Miscellaneous Business.

Dr. Mann: I want to make a motion that the Council of this society be authorized to employ an attorney to look after the business of the society, by the year, or any way that you see fit. My reason for this is this: There are very many questions that an attorney can settle for us. We have been trying in this society, from time to time, to have certain laws enacted by the Arkansas Legislature, and we get nowhere. Our laws are sidetracked one way or another. If the members of this society will employ an attorney, and tell him what they want, and stay away from the Arkansas Legislature and do their *work* at home, they will get the laws enacted which they desire. Now, that is a plain fact that, whenever you go to the Arkansas Legislature and go hanging around these various representatives from your county, they immediately say, "You are selfish. You want this, and you want that." And the other man says, "These doctors have no monopoly on the State of Arkansas." And, if we put this up in a business way—I don't mean in a lobbying way at all—if we employ an attorney, we can get what we want from the State Legislature in Arkansas, and we can get it any time we want it. Whenever there is a meeting of the Legislature, we can get what law we want; but we have got to have an astute lawyer. You might as well attempt to go to court and try your case yourself without an attorney, as to go to the Arkansas Legislature and ask for legislation without a lawyer, because nearly all the men up there are lawyers, and a lawyer has some influence on them, but the doctor hasn't. I know what I am talking about. I have had experience with the Arkansas Legislature every year in trying to get some bill through. I had a funny experience this year. I had two bills that I wanted to get through and the representative from my county opposed both of them, and

he wanted to get through one that I didn't want to get through, and I got both of my bills through and he didn't get his through, and I never even went there at all. I was in Little Rock; but I kept away from the Capitol. That is the motion I want to make.

Dr. Cothern: I want to second Dr. Mann's motion. My experience this year has opened my eyes, and that was one suggestion I made in my report.

Dr. Caldwell: As a member of the Council, I would like to have some kind of idea as to how much money they would be willing for the Council to spend.

Secretary Bathurst: That is left entirely with the Council, and they can make the best trade they can. I think this is a very wise move, and one we should give rather serious attention to.

Dr. Mann: I would like to say this on that point, if I may, and that is that we employ a lawyer who is a real lawyer, and with influence enough to get what he wants, and not a cheap one.

President Warren: I want to say that I have the misfortune to be one of the commissioners of the road district in our county, and we had money tied up in a bonding company in Chicago, which necessitated my going up there. The bonding company's lawyers were Bates, Hicks & Folonie, of Chicago. I got up there and began to talk with them, and they said: "We are the attorneys for the Cook County Medical Society, and for the Illinois State Medical Society, hired by the year.' These societies don't pay them a big fee though. They make arrangements with them. What their work is I don't know. But I found out that the Cook County Medical Society and the Illinois State Medical Society have a firm of attorneys employed by the year.

Dr. Eberle: I think Dr. Mann's motion is a wise one, except in this way, if that motion is adopted it makes it mandatory on the council.

Presiden Warren: It ought to be left optional.

Dr. Eberle: It should be referred to the council, and leave it optional with them.

President Warren: I think so.

Dr. Eberle: Instead of compelling or directing them to employ an attorney now. An attorney will not be needed for two years anyhow.

President Warren: No.

Dr. Mann: I meant to put in that motion that they may employ an attorney.

Dr. Cothern: I will second that.

Secretary Bathurst: Now is the time to employ an attorney, and not wait until the Legislature meets. Let it be known you have employed an attorney, and let him be our legal adviser at all times. Of course, we will use him more during the legislative period; but we can use this man frequently. Things are coming up regarding irregular practitioners, and all forms of cults, and we frequently need legal advice.

Carried.

Secretary Bathurst: Under New Business or Further Miscellaneous Business, I would like to get the view of this society with reference to honorary membership. There are men who have been paying dues here for many years, and would like to have an honorary membership to excuse them from paying dues. One man in partieular ealled my attention to the fact that he had paid for 45 years, and is now praetically incapacitated, but he would like to keep his membership enrolled, and he would like to be excused from paying dues. Should there be a limit as to the time that a man should pay dues? Should not an arrangement be made for honorary memberships, even outside of the profession? I think that is a subject worthy of discussion, and would be glad to hear from someone.

Dr. Norwood: I move that you appoint a committee of three to investigate whether it would be possible to elect honorary members in this society, and, if so, under what terms, conditions, etc., and let them report back to the next session of the house of delegates.

Seconded. Carried.

President Warren: I will appoint as that committee, Dr. M. L. Norwood, Dr. E. E. Barlow and Dr. J. S. Westerfield. We come now to the proposed amendments to the Constitution and By-Laws. We will take up the Constitution, Art. II.

Secretary Bathurst: Before that is voted on, I would like to state that we have suggested an increase of fifty eents, making our dues $3.00. I think our State dues are the smallest of any State that I know of. We are going to employ an attorney now, which will be some little additional expense. We want our committees to do more work. We want

to pay the expenses of the president to visit more county societies. We want the Committee on Cancer Research to do something, for we have to pay them for it. We want the Committee on Medical Legislation and the Committee on Public Health to do even better and greater work, and that requires money. While we have a nice balance of $8,000.00 on hand, it is nothing at all for a large body of this kind. I think we should have more money. Personally I am in favor of increasing the dues fifty cents, even if we lose some per cent of the membership.

Dr. J. S. Westerfield: You will lose a whole lot of them.

Dr. Norwood: I move the adoption of the amendment as read.

Seconded.

Secretary Bathurst: I would like to say further, before this goes to a vote, that our expenses last year amounted to $6,000.00. We have on hand $8,000.00, which gives a margin of $2,000.00. It is not enough money to do the things that your officers would like to do. It may work a little hardship on a few county societies, but we have a whole lot of good ones. While Dr. Westerfield is opposing it, he collects the money every year.

President Warren: We will have a vote by roll call, and it must be four-fifths of the delegates present. They ought all to be here. It means at this meeting.

Dr. L. Kirby: Delegates?

Secretary Bathurst: And officers.

Dr. J. M. Lemons: That is, four-fifths of what there is here?

Secretary Bathurst: It doesn't say "registered."

President Warren: I take it that it means that.

Dr. Cargile: If the chairman means that as a ruling, I appeal from his decision; four-fifths of those present, and not those in Hot Springs.

Dr. Hesterly: I think, if the Secretary feels that we need fifty cents extra to carry on the business of the State Society; he is in a position to know, and I favor the adoption of this amendment, because fifty cents means so little from each man annually. A man that isn't willing to pay the fifty cents, I don't think ought to be a member of this society. So, I heartily approve the adoption of that amendment.

Said amendment to Article XI, on the fifth line, to read, "$3.00 per capita per annum," instead of $2.50 as shown, was adopted by a standing vote of the delegates present, only one delegate opposing the same.

Secretary Bathurst: Dr. Westerfield's county society went on record as opposing this. I am glad to see him sticking to his instructions. While Dr. Hesterly was on the floor, I was thinking of the members of the Hospital Committee, who visit the various hospitals, and there is considerable expense attached to that, and this increase will help bear that expense.

President Warren: The next amendment is Chapter IV, Section 1 of the By-Laws. I will say, in connection with that we take up also Chapter VII, Section 1. If we take up one, we might just as well take up the other at the same time.

Dr. Kirby: I doubt if it is exactly legal to take up both at one time.

President Warren: All right, we will take up one at a time.

Dr. Caldwell: I move the adoption of the proposed amendment.

Seconded.

Whereupon by unanimous vote, said Chapter IV, Section 1, of the By-Laws was amended to read: "The House of Delegates shall meet on the first day of the annual session," instead of on the day before.

President Warren: The next amendment is Chapter VI, Section 3: "The Treasurer shall give bond in the sum of $6,000.00," in place of $3,000.00. This has been increased heretofore, from one thousand to three thousand dollars.

Secretary Bathurst: It has been raised once to $3,000.00. It really is not necessary to raise it.

Dr. Cothern: I move it be adopted to get rid of it.

Seconded.

Secretary Bathurst: You understand the State society pays for this bond.

Dr. Norwood: What is the difference in the cost of the two bonds?

Secretary Bathurst: It will cost $25.00.

On a vote, said amendment failed to carry.

President Warren: Chapter VII, Section 1, "The Council shall meet on the first day of the annual session," in place of the day before.

Dr. J. L. Jones: I move its adoption.

Seconded.

Whereupon, said amendment, being put to a vote, was unanimously adopted.

President Warren: Chapter VIII, Section 1, to read, "Committee on Health and Public Instruction," in place of "Committee on Public Policy and Legislation," and add "Committee on Medical Legislation and Committee on Scientific Exhibit."

Dr. E. F. Ellis: I move its adoption.

Whereupon, said amendment, being put to a vote, was unanimously adopted.

President Warren: The next amendment, Chapter VIII, Section 3, first line, to read, "Committee on Health and Public Instruction," that is just a change to conform to Section 3 of this chapter, and will be considered adopted, with the other. Chapter VIII, Section 5, the fifth paragraph to read, "Such committees shall be appointed by the President, unless otherwise provided, so that the term of office of one member shall expire every year." That has reference to all the standing committees, I take it.

Secretary Bathurst: Yes.

Dr. Jones: I move its adoption.

Seconded.

President Warren: That was the intention of this amendment, that it apply to all standing committees, whether it says that or not, that was the intention, I am sure.

Said amendment, being put to a vote, was unanimously adopted.

President Warren: The next amendment to Chapter VIII, Section 1, is with reference to filling vacancies in these committees. Any vacancies in office, I suppose the Council is empowered to fill them, but what shall we say about that. The amendment, as it appears in the program is, "Also to make provision for the permanent filling of all vacancies that may occur through the death, resignation, or removal of any member."

Dr. Ellis: I move the adoption of that paragraph.

Seconded.

Dr. Jones: Why not make it "member of any standing committee."

Secretary Bathurst: This comes right under the reference to standing committees.

Said amendment, upon being put to a vote, was unanimously carried.

President Warren: The next amendment is Chapter VIII, Section 2, seventh line, to read, "On or before March 1 of each year," in place of "Thirty days prior to the annual meeting." The Secretary tells me this has reference to the payment of our dues, and not to the preparing of the program.

Secretary Bathurst: That was evidently an error in describing it. It was intended to refer to the payment of dues. The making of the county society's report is to be made on or before March 1, by this amendment, and is not supposed to have any referenee to the program.

President Warren: This is entirely wrong as it is in the program. The change that is suggested has reference to the Committee on Scientific Work, which shall eonsist of three members, and their report shall be closed," etc. That's what this has reference to.

Dr. Norwood: Inasmuch as there is some misunderstanding about it, I move that it be rejected.

Secretary Bathurst: I second the motion.

President Warren: I objected to this in my address.

Secretary Bathurst: It is evidently a typographical error as to the chapter and section.

Dr. Norwood: It can go until next year.

Secretary Bathurst: Yes.

Said amendment, being put to a vote, was defeated.

Thereupon, on motion, the House of Delegates adjourned until the next day, Wednesday, May 4, 1921, at 9:00 o'clock a. m.

HOUSE OF DELEGATES.

Second Day.

Wednesday, May 4, 1921.

The House of Delegates was called to order at 9:30 a. m., by the President, Dr. Warren.

President Warren: We have with us this morning two fraternal delegates from sister States, Dr. T. S. Ragland, of Gilmer, Texas, as a fraternal delegate from Texas, and Dr. E. F. Bacon, of New Orleans, La., as a fraternal delegate from Louisiana. We shall be glad to hear from them if they are present at this time.

On motion of Dr. E. F. Ellis, seconded by Dr. L. Kirby, the privilege of the floor were extended to Dr. Bacon and Dr. Ragland,

fraternal delegates, and to Dr. N. L. Barker, a visitor from Broken Bow, Okla.

Dr. E. F. Bacon: I wish to express my appreciation for the privilege and pleasure of being given the floor, and also to thank you on behalf of the Louisiana State Medical Society. I carry a message from them to invite you all, whenever you see fit, to attend any one of their sessions. New Orleans, as you know, has a great institution in the Charity Hospital. There is plenty of material down there, and you can get a very good post-graduate course in a very short space of time. These clinics are held every morning for about a week before and a week after our meetings, and I think every one of you will profit by them if you will just attend our sessions yearly. Our society meets next year in Alexandria. You don't have to come as far as New Orleans. Every other year we meet in New Orleans; but when we meet at Alexandria, I think that is close enough for you all to attend. Other years we meet at Baton Rouge, Shreveport, and Monroe, or elsewhere. We shall be glad to welcome you at any time. I know that the Louisiana State Medical Society will appreciate your visit, if you come. (Applause.)

Dr. T. S. Ragland: Mr. Chairman, and Gentlemen of the Arkansas Medical Society: I am mighty glad to have the privilege of attending your meeting. What I have seen and heard of your program has been very pleasing indeed to me. I am glad to bring greetings to you from your sister State Association to the southwest, and assure you that, in all things pertaining to scientific medicine and to the welfare of the people generally, we join hands with you in every noble undertaking. Your State, as we all know, has been abundantly endowed with those things that make for the betterment of health, for the cure of disease, for the better safeguarding of the people. Your wonderful mountain climate, your mineral waters and your wonderful hot water of Hot Springs have a national and an international reputation. You have advantages that possibly we of other sections have not. Your chronic cases you can refer with little expense and inconvenience to these health resorts. We are glad to send you our patients and we do patronize you from our State of Texas, to a great extent. I am glad to know that your State Association has taken a stand for a higher standard in scientific medicine. We in Texas are doing the same. For instance, our State law in Texas requires that each and every man that practices medicine must stand an examination before one board. At our last session of the Legislature we endeavored to amend that law by adding an injunction amendment, that, where a man violates the medical practice act and is convicted, the court in which he is tried can enjoin him from any further practice. As you all well know, your quacks sometimes don't mind paying a fine or staying in jail a day or two and getting out and plying their trade again. So, we attempted to put that bill through. I think that is the solution of that proposition in treating with our quack friends, who play upon the credulity of the public.

I didn't intend to make a speech, but, as a last word, I want to cordially invite you to attend our Texas State Medical Association, which meets in Dallas, the big city of the Southwest, next week. Our session begins on the 10th, and ends on the 13th. You come over to Dallas, and we will show you something a little bigger. We have big things over there, in common with the size of our State, you understand. (Laughter.) If you boys will come over to Dallas, we will show you a big time. I thank you, gentlemen, for your kind courtesy and consideration. (Applause.)

REPORT OF COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION.

To the President and Honorable Members of the House of Delegates, Arkansas Medical Society:

Sirs—We, your Committee on Health and Public Instruction, beg to submit the following report for the fiscal year ending April 30, 1921.

At the request of the Committee on Health Problems in Education, of the American Medical Association, your committee met with a similar committee appointed by the Arkansas State Teachers' Association, at its annual convention in Little Rock, November 11 to 13, 1920. Practically two days were devoted to drafting the co-operative program which was submitted to the State Teachers in general conference and unanimously and enthusiastically adopted, copy of which is hereto attached.

We found the teachers very anxious to co-operate with the State Health authorities and the members of the medical profession in bringing about an improved sanitary and hygienic condition, especially at the schools throughout the State.

While many members of the medical profession gladly do everything they can do to aid in accomplishing these results, your committee is of the opinion that there are many members of the profession who do not recognize their responsibility to the general public and do not utilize to the fullest extent the opportunities afforded to be of real service in reducing the incidence of disease and death, which can only be done by the application of the principles involved

in preventive medicine. Therefore, your committee would respectfully recommend that you, as delegates representing your component societies, attempt to devise some plan whereby the sentiment for preventive medicine will be quickened to the end that every physician, whether he be a member of the State Society or not, will be enlisted in this all-important work.

Your committee further desires to report that pursuant to the $200.00 made available at the forty-fourth annual meeting of the Society, fifty thousand of each the malaria and typhoid pamphlets were printed, which have been distributed only in part, as most of the rural schools are held during the summer months, at which time the balance will be distributed.

It is desired further to state that the Arkansas Department of the American Legion is very much interested in aiding the medical profession in its efforts to spread the principles of preventive medicine, and in many local communities has been a very definite factor in bringing about improved conditions.

There has been much favorable comment on the stand taken by the Arkansas Medical Society in assisting the health authorities where many schools are requiring examinations on malaria and typhoid control as taught by the leaflets distributed by your committee. Therefore, we would recommend that if the finances of the Society will warrant it, that an appropriation even larger than the one made for the past year be made in order that the Committee on Health and Public Instruction next year will be enabled to make direct appeal to the mothers in child welfare work. This is opportune, as the Federal Government has recently detailed Dr. Frances Sage Bradley, from the Children's Bureau, with a competent corps of assistants to examine children of pre-school age in those sections of the State selected by the State Board of Health. Already numbers of requests are being received by the State Board of Health for literature on pre-natal and post-natal care of babies as well as the care of motherhood.

Respectfully submitted,

C. W. Garrison, *Chairman*,
O. L. Williamson,
R. Y. Phillips,
Thos. Douglass,
M. L. Norwood,
Committee.

Resolution.

Whereas, Health is paramount to the school child, and

Whereas, An effort is being made to standardize a school health program throughout the country,

Therefore, Be It Resolved, by the Arkansas State Educational Association:

Item 1. That the next General Assembly be requested to provide, in so far as possible, for the physical examination and training of the public school children of the State.

Item 2. That where a sanitary survey has not been made of the school building and premises, the principal request the local health officer to make such a survey.

Item 3. That the principal of the school, in case the water supply is from a spring, dug well, shallow or driven well, request the local health officer to investigate the safety of the supply and make a report to the School Board with recommendations in case the water supply is unsafe; and further, that the School Boards be and are hereby requested and urged to carry out recommendations immediately.

Item 4. That the principal of the school shall notify the local health officer in case the minimum requirements under the law for the disposal of night soil is not complied with. When a sewer system or other method of sewage disposal is desired, request be made direct to the State Board of Health.

Item 5. That the Modern Health Crusade is hereby indorsed and approved.

Item 6. That the Red Cross program of Home Hygiene and Health Centers be and the same is hereby endorsed.

Item 7. That the volunteer public health agencies in the State are hereby requested to co-ordinate their activities through the State Board of Health in order that duplication may be avoided and the funds economically administered.

Item 8. That copies of these resolutions be furnished to the newspapers of the State and that the Department of Education be requested to make every reasonable effort to have the program put into effect in so far as possible and further that the State Board of Health furnish all local health officers with a copy of these resolutions.

Respectfully submitted,

Mr. J. L. Bond,
Mr. H. A. Woodward,
Mr. A. B. Hill,
Miss Irene Jones,
Mr. R. C. Hall,
Committee from State Teachers' Educational Assn.
Dr. M. L. Norwood,
Dr. R. Y. Phillips,
Dr. Thos. Douglass,
Dr. O. L. Williamson,
Dr. C. W. Garrison, *Chairman*,
Committee from Arkansas Medical Society.

Secretary Bathurst: This carries an appropriation. I move that it be referred to the Council.

Seconded. Carried.

Dr. Mann: If I am in order, I move that the appropriation be increased to $500.00.

President Warren: You are out of order. This report just read touched on infant welfare, and touched upon it largely. There were five on the Committee on Infant Welfare, and, so far as I know, there is not one of the committee here. I am sure I made a mistake in naming the personnel of that committee. I feel like there was not a more important committee appointed from this society, and one that I urged to duty any more than that. It is absolutely painful to me; it is the one subject that I thought most of, and I felt it ought to be acted upon. The next is the report of the Committee on Hospitals, Dr. C. S. Pettus, chairman.

REPORT OF COMMITTEE ON HOSPITALS.

Dr. Pettus:

Mr. President and Delegates:

We, the Committee on Hospitals, wish to submit the following report.

There are many indications of improvements with the hospitals of our State, which gives encouragement and suggest that the future promises much to the profession through hospital advancement.

Several new hospitals have been built over the State since the last Hospital Committee report, among

which may be mentioned the new hospital at El Dorado. This hospital meets the demand created through the oil development of that vicinity.

The Baptists of the State have purchased the hospital formerly known as Little Rock Sanitarium and have improved it, conducting a sixty-bed hospital as an initial unit. Satisfactory efforts are being made to standardize this hospital to meet the requirements of the American Medical Association, the American College of Surgeons, Catholic Organization, etc. This institution is to be enlarged in the near future.

The Baptist Hospital at Pine Bluff, has the co-operation of the doctors of that city, which may enable them to meet the requirements for standardization. This improvement is pleasing and worthy of note.

The St. Vincent's Hospital has perfected its standardization, the staff of that hospital has done constructive hospital work and deserves commendation.

Fort Smith and other cities of our State might be mentioned; but this report would be too lengthy to record all hospital improvements over the State.

We wish to call your attention to difficulties encountered by hospitals in procuring a sufficient number of student nurses. This has created something of a laxity in demanding the fulfillment of requirements among some of our hospitals.

The profession of nursing is entitled to our support and co-operation. The members of staff and superintendents of hospitals who are indifferent to the training and conduct of young ladies preparing for the great profession of nursing, do a grievous hindrance to the elevation and development of an important and valuable profession.

We emphasize a resolution made in last year's report of the Hospital Committee, that all hospitals conducting training schools should be standardized as required by the American Medical Association, American College of Surgeons and Catholic Organization; otherwise, their students will not be permitted to come before the Board of Examiners of nurses.

An injustice is done to ambitious, honest and well-trained nurses, if training schools are not careful to comply with the entrance requirements for pupil nurses, and in failing to enforce the laws regulating the application for license to practice the profession.

We bespeak for the State Board of Nurse Examiners the support of this society in helping them to maintain the advanced standards of nursing which they have already undertaken to enforce.

There has been some opposition to the raising of the standards of nursing on account of the belief in some quarters, that it would result in a smaller number of students entering training; but efficiency should not be sacrificed to prevent a possible shortage. Therefore, at this time we call to the attention of this society, this nurse problem, which, if solved correctly, will be an aid to the program of hospital advancement.

C. S. Pettus, *Chairman,*
John Stewart,
W. W. Jackson,
R. C. Dorr,
S. J. Hesterly,
Committee.

On motion report of Committee on Hospitals was received and adopted.

President Warren: The selection of the State Board of Medical Examiners was postponed from yesterday until today's session. In that connection I will say that our Constitution and By-Laws do not provide for that; but it is provided for by the statute of the State, and, therefore, not only the delegates be entitled to get together from those counties and make the selection, but any and all members present ought to have the same privilege; because it is a statutory law, and not a law of the Arkansas Medical Society. I will declare a recess for a few minutes to allow the members from the several Congressional Districts to make their selections to fill these vacancies.

Selections for Appointment on Board of Medical Examiners.

Second Congressional District—O. L. Watson, of Newport; Sam. J. Allbright, of Kensett; and J. C. Swindle, of Walnut Ridge.

Third Congressional District—J. W. Walker, of Fayetteville; F. B. Kirby, of Harrison; and J. T. Tipton, of Mountain Home.

Sixth Congressional District—J. T. Palmer, of Pine Bluff; J. M. Proctor, of Hot Springs; and E. T. Bramlitt, of Malvern.

Seventh Congressional District—E. E. Barlow, of Dermott; H. A. Ross, of Arkadelphia; and F. E. Baker, of Stamps.

President Warren: You heard the names. I presume those recommended are all present at this meeting. If they are not, I believe they should be in order to be eligible. I don't believe we ought to recommend anybody for a position who is not present.

There was a Committee on Honorary Members appointed yesterday, to report today.

REPORT OF COMMITTEE ON HONORARY MEMBERS.

We, your Committee on Honorary Membership, recommend that all physicians who have beeen active members of the Arkansas State Medical Society for twenty-five years, and that any such members who may become prematurely aged or physically infirm, may be placed upon the Honorary Roll upon recommendation by his County Medical Society.

M. L. Norwood,
E. E. Barlow,
J. S. Westerfield,
Committee.

Dr. Ellis: I move the adoption of the report of committee.

Seconded.

President Warren: The Secretary thinks that would be a change in the Constitution and By-Laws. I don't see that there is anything in the Constitution and By-Laws about honorary members. I doubt if it would be a change and have to lay over. However, I am subject to correction as to that.

Secretary Bathurst: Who is to decide this? It should come through the County Society before it reaches the State Society.

President Warren: What shall we do with this report?

Dr. Caldwell: The more we think about that, the more there is to it. I don't know whether we can adopt that report unless we make an amendment to our Constitution and By-Laws. I should think, before we can make any arrangements for honorary members, we would have to change our Constitution and put another amendment in.

President Warren: There is nothing said about it in the Constitution.

Dr. Norwood: I don't see why we should have to make any amendment to the Constitution and By-Laws.

Secretary Bathurst: The By-Laws state this: "The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be prima facie evidence of membership in this Society."

Dr. Thos. Douglass: I believe this is a matter which really involves changing the Constitution. I suggest that the matter go over until the next annual meeting.

Dr. Norwood: You have the ruling from the chair.

Dr. Caldwell: I will say that, in the Pulaski County Medical Society, we have arrangements made that members of the profession stationed at Fort Roots can be honorary members of our Society, and it is in the Constitution and By-Laws that they can be members.

Secretary Bathurst: That doesn't make them members of the State Society.

Dr. Caldwell: No, but it makes them members of our County Society. We have it in our Constitution and By-Laws that they can be members.

President Warren: The chair holds that it would not be necessary to put this in the Constitution, with reference to honorary membership. Now, that is going to be my ruling on it, because it is something that is out of the ordinary, and it is something that should really not be in the Constitution and By-Laws. I can not see why it should be. It is just a matter that we are proposing to take care of as a body here, and giving the county societies the privilege to elect some who are entitled to it, if they want to.

Dr. Kirby: The Secretary of the State Society will have a good deal of trouble if he undertakes to run on that plan. He cannot recognize any county society as having members in it unless they have paid up their dues for each member, and the Secretary reports them as having paid. He would have to drop so many out of each county society on each report made, until this By-Law is changed. That's the only procedure I think there is for that. Of course, if we have something that says that a man is an honorary member of the State Society, it is all right. He would have to pay in his dues, or he would have to drop so many members, because he would be held responsible for the dues of every member in that county society, under the By-Laws.

Dr. Wm. Breathwit: It may be that I don't understand that report very well, but, if I do, it is a little ambiguous, or else it is in contravention of our Constitution, as I gather from the reading of this report of the committee.

President Warren: Just a minute. I will read it to you. (Reads.)

Dr. Breathwit: Now, if that is true, the onus is on the county society; but they would have to pay that honorary member's dues to make him a member of the State Society and to secure the Journal for him. That being true, I would vote for the adoption of this report and let each county society take care of their honorary membership. (Applause.)

Dr. Cargile: If it is in order, I move that there be inserted a clause exempting them from dues. It is not customary for honorary members to pay dues. I am an honorary member in a medical society, and have been for ten years and they never ask me for dues. I offered my dues, and they said no payment was customary. That is the Southwest Missouri Medical Society.

Dr. Barlow: The intention of the committee was to leave this to the discretion of the county medical societies.

Dr. E. H. Hunt: We have a member of our society who has practiced 71 years, and we have made him an honorary member. We just pay his dues and let it go at that. I think each society should take care of it that way. It is thoroughly a local affair. The State society doesn't know anything about it.

President Warren: That's the way I look at it.

Dr. Cargile: Carrying out that idea, I would expect that they would have the privileges of the State society.

President Warren: Sure they would, because the county society would pay for them.

Dr. Cargile: You take the old men. We see them sometimes. They grow old, and they are not only physically disabled, but they are financially unable to meet some expenses. I have seen some old men who barely could make a livelihood. They economized very closely, with very meager provisions. I believe it would be but charitable, nice and right to insert that clause, and along with it, that they have the privileges of the State society. If they come here, give them the privileges of the floor, as we do others.

You say it would no tbe in order to make a motion of that sort?

President Warren: I don't know that it would be. I think you would have to lay it over and let it go.

President Warren: All in favor of the motion, of adopting this report of the Committee on Honoraray Membership, will make it known by a rising vote.

(The same was carried by a vote of 40 to 2.)

Dr. Cargile: Now, is an amendment in order now?

President Warren: Yes, but it will have to lie over a year.

Dr. Cargile: Let it lie over. I insist upon it. I make a motion that it be provided that these old men, or these honorary members be exempt from dues.

President Warren: That would be a change in the By-Laws and Constitution. Just submit that in writing.

Dr. Cargile: They are not regular members. They are honorary members. Therefore, I don't believe we should rule so rigidly on that matter.

Dr. Caldwell: Doesn't the other motion cover that?

Secretary Bathurst: It is left to the county society where the man lives. Let them be the judge.

Dr. Mann: That doesn't require a second.

President Warren: If he wants to introduce a resolution, it is all right to introduce it as a resolution.

Said motion was here seconded.

Dr. Saxon: It seems to me that Dr. Cargile's motion covers a little too much ground. My understanding of the status of an honorary member in any organization is that he has all the privileges except holding office and participating in any of the business transactions of the society. It seems to me, if you are going to make a motion like this, that you would have to amend your Constitution; you would have to provide there a special clause stating what our society grants to an honorary member. But, the ordinary construction of the term "honorary member," to my understanding, would be the giving of all the privileges, with the exceptions I mentioned. It seems that Dr. Cargile is asking, without any motion at all or without any action, for a change in the wording of our Constitution.

Dr. Cargile: In connection with that, I want to say this, that it is customary everywhere that honorary members are not expected to pay dues. They are not eligible to office, but are simply honorary members. They can attend our meetings and participate in the scientific discussions, but they are not expected to have anything to do with the business affairs. They have no vote. We have the precedent everywhere. That is a well-established custom. I am insisting upon this, because it is right; because it hasn't been customary for honorary members to pay dues.

Dr. M. C. Hughey: I think there is a distinction between honorary members of a county society and of the State society. An honorary member of a county society doesn't pay his dues and he is a member of the State society. I cannot see why he should not be a member of the State society, because the county society pays his dues.

Dr. Cargile: My contention was that no one pay his dues. He is not required to pay any dues.

Dr. Hughey: The county society should pay his dues, to make him a member of the State society.

Dr. Eberle: I want to say, in the first place, that a member of the Arkansas Medical Society has got no business getting old. (Applause.)

Dr. L. Kirby: That's the way I vote.

Dr. Eberle: As an illustration, I point to Dr. Kirby. I don't see the necessity of legislation in this matter. If the county society chooses to pay a member's State dues, it has the right to do it, just as anybody else could pay a member's dues. The State society is not interested in anything except the payment of dues, regardless of who pays them.

It is optional with the county society as to whether they will carry their honorary members or whether they will let the honorary member pay his own dues. We have a rule that, when a member reaches the age of 65, he becomes automatically an honorary member, and is excused from further payment of dues in the county society; but he must pay his dues to the State society.

Secretary Bathurst: That makes him eligible to membership of the A. M. A. if he wants to be.

Dr. Eberle: I believe the thing will work out all right, without any legislation, if the members quit getting old.

Dr. Norwood: I think Dr. Cargile's motion is covered in the original motion. We may not have expressed clearly what we wanted to say; but it was in the minds of the committee that, if by reason of age, physical infirmity or anything else, a man was not able to pay his dues, and the county society so recommended to the State society, he was an honorary member of both the county and State society without the payment of dues. I think that covers the case. Dr. Cargile said he didn't so understand it, when he made his motion.

Dr. Cargile: If that is the intention, I withdraw the motion; but it ought to say so.

Secretary Bathurst: We will see that it says so.

The report of Dr. E. H. Martin's death having come to the notice of the House of Delegates, on motion the chair appointed Dr. E. F. Ellis, of Fayetteville; N. J. Latimer, of Corning, and J. E. McGuire of Piggott, a committee from the Society to attend the funeral and to procure a suitable floral offering for the occasion.

It being ascertained that Dr. John B. Deaver of Philadelphia was in the city, the chair, on motion, appointed Drs. E. F. Ellis, Leonidas Kirby and E. E. Barlow to invite Dr. Deaver to visit the annual session of the Arkansas Medical Society. To this invitation Dr. Deaver sent the following reply, which was received and ordered filed:

Hot Springs, May 4, 1921.

Drs. E. F. Ellis, Leonidas Kirby, E. E. Barlow:

Dear Doctors—I much appreciate your letter. I am distressed over the condition of my son, John Jr. Thank you for kindly thinking of me at this time. I should very much like to meet all your members; but I am sure you can appreciate my state of mind.

With kind regards and appreciating your courtesy, I am,

Sincerely yours,

JOHN B. DEAVER.

Adjourned.

HOUSE OF DELEGATES.

THIRD DAY.

Thursday, May 5, 1921.

The House of Delegates was called to order by the President, Dr. Warren, at 2:15 p. m., a quorum being present.

President Warren: Those entitled to vote are the regularly elected delegates or the alternates who will take the place of any who are absent. In the event that the regularly elected delegates or alternates should come in, of course, those who have been seated are requested to yield up their places, and the others will take their seats and vote. We will now hear the report of the Nominating Committee:

REPORT OF NOMINATING COMMITTEE.

For President—Chas. H. Cargile, Bentonville; Robert Caldwell, Little Rock; R. H. T. Mann, Texarkana.

For First Vice President—Don Smith, Hope.

For Second Vice President—A. M. Elton, Newport.

For Third Vice President—J. O. Rush, Forrest City.

For Secretary—Wm. R. Bathurst, Little Rock.

For Treasurer—Robt. L. Saxon, Little Rock.

For Councilor, First District—Thad Cothern, Jonesboro.

For Councilor, Third District—E. D. McKnight, Brinkley.

For Councilor, Fifth District—F. E. Baker, Stamps.

For Councilor, Sixth District—T. F. Kittrell, Texarkana.

For Councilor, Seventh District—W. T. Wootton, Hot Springs.

For Councilor, Ninth District—R. H. Huntington, Eureka Springs.

Delegate to American Medical Association—Wm. R. Bathurst, Little Rock.

Alternate to American Medical Association—G. A. Warren, Black Rock.

President Warren: Dr. Kittrell is not here, and that would make him ineligible. We will ask the Nominating Committee to supply someone else to take his place.

Dr. Norwood: Your contention is right, about Dr. Kittrell not being here. Shouldn't the Nominating Committee convene and select someone else?

President Warren: Yes, or somebody will have to nominate a substitute. I would rather that the committee nominate someone.

The selection of a President being now in order, we will proceed to balloting. I will appoint as tellers Dr. Barlow and Dr. McGuire.

Thereupon, the House of Delegates proceeded to ballot upon the three names selected by the Nominating Committee, Dr. C. H. Car-

gile, Dr. Robt. Caldwell and Dr. R. H. T. Mann.

After two ballots had been taken without a choice being made, on motion, Dr. Mann's name was dropped. Upon a third ballot being taken, Dr. Cargile received a majority of all the votes cast, and was declared elected.

On motion of Dr. Caldwell, the vote was declared unanimous.

Dr. Hughey: I move that the other officers be elected by acclamation, and that the Secretary cast the vote.

Dr. Eberle: The Nominating Committee presents the name of Dr. J. H. Stidham as Councilor from the Sixth District, in place of Dr. Kittrell, whose name was announced a while ago. Dr. Stidham has beeen Councilor for the First District, and has moved into the Sixth District.

President Warren: Dr. Stidham is not a member of any society in that district.

Secretary Bathurst: He has not been up until today, but he has transferred.

President Warren: He can transfer, but it is a question in my mind whether you can elect a man for a Councilor of that district that is not a member of a society in that district. I don't think you can, and I am going to hold that you cannot.

Dr. E. H. Hunt: I see no reason, if he is a member in good standing and lives down there. His membership is moved automatically.

President Warren: He is a member of the Lawrence County Medical Society.

Dr. Hunt: He was transferred today. I move that he be elected over the President's protest.

Dr. Norwood: I want to appeal from the chair's ruling on that.

President Warren: Dr. Stidham is an experienced councilor. He has been in our society and has been a good member; but he is a member of the Lawrence County Medical Society, and I can not see that he is eligible to be a councilor of some other district, in which he does not hold membership. That is the position of the chair.

Dr. Don Smith: Dr. Stidham is a duly elected member of the Hempstead County Medical Society, of which I am also a member. That clarifies the situation.

President Warren: If that be true I would like to see him elected, but I do not want to get into a tangle. If there is no objection, I shall rule that he is eligible. We will have the names read again, with the corrections.

(The report was read again.)

On motion of Dr. Norwood, Dr. Barlow cast the vote of the House of Delegates as an entirety for the other officers selected by the Nominating Committee.

President Warren: Just a little explanation with reference to the chair's ruling on Dr. Stidham. He has been a member of my county society ever since he practiced medicine, and he was to represent Lawrence County Medical Society in this House of Delegates here, if Dr. Swindle had not come, because he still held his membership there. Dr. Smith has just told me that he has put in his application for membership in the Hempstead County Medical Society. I want to say this, that Dr. Stidham is a conscientious, thorough-going, active man, and they won't have a member in the southwestern part of the State that will be more enthusiastic and energetic or come nearer doing his duty than Dr. Stidham. I have known him all of his medical life, and have been with him and behind him, and appointed him on this program of the Scientific Section, and he did his duty well; and he will do his duty as councilor, too. (Applause.)

Dr. Norwood: I have a resolution I am requested to offer:

Whereas, The United States Government contemplates the erection of a reconstruction hospital for the Southwestern District of the United States; and

Whereas, Hot Springs, Arkansas, is pre-eminently adapted for such an institution, from the standpoint of location, climate and its hot springs; therefore,

Be It Resolved, That the Arkansas Medical Society hereby memorializes the Locating Committee to investigate carefully the advantages offered by Hot Springs, with a view to locating this institution in said city.

Adopted.

Dr. Cargile: About ten years ago I made a motion that Dr. Gibson, as chairman, and two other members of this society, should compile a history of the medical society in Arkansas. Dr. Gibson was mentioned because he knew more about it than any one of us, or all of us. He had more data and information filed away on the subject than all the rest of us; besides his memory was strong for these things. Now, Dr. Gibson died without completing that work. His papers are in Little Rock. It seems that there are two sets of papers; some of them have

gone to one library, and some to another, I believe. Now, my motion is that the Pulaski County Medical Society be requested to employ, not a committee of doctors, but to employ an expert in such matters to investigate those papers. I am sure they are accessible. Dr. Vinsonhaler is in a position to help more than anyone else in securing access to those papers; and, of course, he will do so. We should hire a trained expert in such matters to investigate everything possible, even to going over the early files of the daily papers of Little Rock to get a correct history of those societies. The longer you put it off, gentlemen, the worse it will be. It was a great misfortune that Dr. Gibson died before it was completed. Furthermore, I want the motion to include the provision that this society pay for that expense. Now, there are a great many errors. To illustrate, and I don't say this in a spirit of criticism, but to show the necessity for revision—this program says the "Forty-fifth Annual Meeting of the Arkansas Medical Society." Yet, everybody who knows anything about it, everybody you have heard quoted on the subject, will tell you that the first meeting was in 1875. Counting the meeting in 1875, there were twenty-six meetings in the last century. We have had twenty-one this century; twenty-one and twenty-six make forty-seven, and this says the forty-fifth. Now, there is an error somewhere. I can say to you that perhaps that when we first met may not have been counted. Some of you gentlemen, or most of you, I suspect, from some conversations I have heard, are not familiar with a little of the history. We originally had the Arkansas Medical Association, but there came up a division over the conduct of some physicians, and a resolution was adopted endorsing certain things or supporting certain things that were protested against by some others. Dr. Breysacher, a partner of Dr. P. O. Hooper, whom all of you older men used to know, got up in the meeting and said, "We, the undersigned, for the following reasons," naming them, "feel constrained to withdraw from this organization." They then organized the Arkansas Medical Society. There were for a time two societies. That's why we are not called the Arkansas Medical Association in conformity with what is the rule everywhere else, in imitation of the American Medical Association. That's why we are a society instead of an association. Now, there were two sets of delegates at the next meeting of the American Medical Association in 1876 in Philadelphia. I was there as a medical student and attended the meetings. I know something of this. I think it was at that meeting that a decision was rendered in favor of the new organization, the Arkansas Medical Society.

By the way, Dr. Gibson came on to Philadelphia and was in school with us there in 1876-7, and told us all about it. I was somewhat familiar with it before I left home in 1875. So, this organization dates from 1875; but, granting you don't count that first meeting, and the first meeting was in 1876, the first after recognition, then it is the forty-sixth instead of the forty-fifth annual meeting. Either way it seems wrong. There is an error, gentlemen, I think. I talked to Dr. Gibson about this some years ago, and very promptly he said, "You are mistaken." But, when we got figuring together, he said, "You are right," but I don't understand how it is.

Secretary Bathurst: There was one year they didn't hold a session. The society is forty-seven years old, but this is the forty-fifth annual session.

Dr. Cargile: Now, you see that brings out some history.

President Warren: One year they didn't meet.

Dr. Cargile: Not criticising Dr. Warren, yesterday he said that he believed Dr. Gibson was the first Secretary and served until he was elected President at Fort Smith in 1896. Part of that is true, but part of it I think is not true; because Dr. Gibson and I graduated together in 1877. It is not probable that he was Secretary of this society when he was a medical student. So, if Dr. Warren's address goes down in history, after a while it will be accepted as the truth.

President Warren: I am going to look that up.

Dr. Cargile: I move that the society employ an expert.

President Warren: For the benefit of Dr. Cargile and others, who may be interested, I will state that Dr. Gibson's history or records in this matter can be found in the Statehouse at Little Rock, under the supervision of or in the care of the History Commission, and those things can be compiled from those papers, because they deal directly with it.

I didn't have time to investigate, when I got up my address. What I took was from Dr. Gibson's own statements. I don't know that it is accurate; but largely my address was written from memory. "According to my memory," I said. According to my recollection Dr. Gibson had said that he was the first Secretary and served twenty years. I know he was elected President in 1895. I was there. From that time on I cannot tell you definitely. But, the History Commission in Little Rock have these papers and you can get them.

Dr. Cargile: This morning I conversed with Dr. Thibault, Dr. Gibson's nephew, who knew something of his uncle's affairs. He tells me that those papers are not together; but there are two sets of papers, and in some way divided.

President Warren: There is a set of papers in the Medical Department of the Arkansas University belonging to Dr. Eberle. He had a set of papers also.

The original motion being put, it carried.

Dr. Eberle: I have a resolution that I want to offer:

Resolved, That the Committee on Medical Legislation be and it is hereby directed to inaugurate some form of legislation whereby physicians examined and testifying as expert witnesses in the courts shall be tendered a commensurate fee for such service.

I move the adoption of that resolution.

Seconded. Carried.

Dr. Garrison: By request, I desire to read a couple of communications at this time.

I move that the Secretary be instructed to send out these communications to the proper authorities.

Seconded. Carried.

President Warren: If there is no objection, I will instruct the Secretary to send out the following telegram to the various State Medical Associations and to the Southern Medical Association.

Georgia State Medical Society, Dr. Allen H. Bunce, Secretary-Editor, Hotel General Forest, Rome, Ga.

The Arkansas Medical Society, now in annual session at Hot Springs, sends greeting to the Georgia State Medical Society. We most cordially invite and urge your members to come to Hot Springs this November when the profession of Arkansas and of Hot Springs are host to your own and our own great Southern Medical Association.

(Signed) ARKANSAS MEDICAL SOCIETY,

Texas State Medical Association,
Oklahoma State Medcial Association,
Missouri State Medical Assoeiation,
Mississippi State Medical Association,
Florida State Medical Assoeiation,

The Arkansas Medical Society in annual session at Hot Springs instruct me to send greetings to you in annual session and to most cordially invite and urge your members to come to Hot Springs this November when the profession of Arkansas and of Hot Springs are host to your own and our own great Southern Medical Association.

(Signed)

ARKANSAS MEDICAL SOCIETY.

To the Southern Medical Association.

At our annual session last year we, by an official action, joined with the Garland County (Hot Springs) Medical Society in extending you an invitation to hold your 1921 meeting in Hot Springs.

The Arkansas Medical Society, now in annual session one year later at Hot Springs, do express our deep appreciation of your acceptance of Arkansas' invitation. We feel honored that you are coming to Hot Springs this November—we are truly glad you are coming. The organized profession of Arkansas pledge our best efforts to make your meeting in our State the best you have ever had.

We not only most cordially invite and urge your own members to come in great numbers, but all members of the State and county medical societies in the States comprising the Southern Medical Association.

A warm welcome awaits you next November in Arkansas.

(Signed) ARKANSAS MEDICAL SOCIETY.
Hot Springs, Ark., May 5, 1021.

To the Members of the Arkansas Medical Society.

At our meeting last year we joined with the Garland County Medical Society in inviting the Southern Medical Assocation to meet this year in Hot Springs.

That invitation was accepted and our own Southern Medical Association will meet this November in Hot Springs.

The Arkansas Medical Society now in annual session at Hot Springs calls upon its members to do everything they possibly can to make this meeting a great success. We urge just as many of you as can do so to attend.

(Signed) ARKANSAS MEDICAL SOCIETY.
Hot Springs, Ark., May 5, 1021.

On motion the House of Delegates adjourned sine die.

MEMORIAL SESSION.

Wednesday, May 4, 1921.
10:30 A. M.

President Warren: The chairman of this committee, Dr. Vinsonhaler, went away last night with Dr. Hugh McKenna, who was a colleague of his during the war, and wanted to have his company at Camp Pike today. Dr. Vinsonhaler came and told me that it was most imperative that he go.

Dr. Mann: I make a motion that you hold memorial services at this time, and make the session very brief.

Seconded. Carried.

President Warren: I will appoint as chairman of that committee Dr. Mann. He has been chairman of the Committee on Necrol-

ogy for the last seven years. I will let him take the chair.

Dr. Mann: It seems that this is a duty which has been placed upon me from time to time to conduct these memorial services. Our worthy President told me yesterday that he was going to relieve me of the chairmanship of this committee, and place Dr. Vinsonhaler thereon, in order that I might be rid of a painful duty. I assured him, however, that I was always willing to do anything that I could for the Arkansas Medical Society. For several years now I have been conducting these memorial services on behalf of the Arkansas Medical Society, in an effort to appropriately remember our dead. The more I say about the dead, the livelier our society becomes, in one sense.

I do believe, however, that, as a whole, as we go through life, we do not pay enough attention to the members of our society who have died during the year. My own opinion is, if I were myself to write the real history of any community, if I were to write out the heart of the people and wished to find the real heart of the people, their real pulse beat, not the outside pulse beat, not the glare of their theaters or the traffic of the cities or the wealth of the county, I wouldn't look at any or all of these things; but, my friends, if I were to go to find the real heart of a community, I could soon find that by making a very limited investigation.

In the first place, I would investigate the cemetery in that community. If I found the grass growing in the walks; if I found the tombstones falling over; if I found cattle grazing over the grassy mounds, that would go a long way toward measuring the real heart of that community.

The second investigation which I would make would be to see how that community was respecting, was taking care of and was looking after the aged and the infirm; those who had been unfortunate in life with no means to take care of themselves. When these two questions had been answered, I would know immediately where the heart of that community was; whether their sentiment was centered on real manhood and womanhood, or whether it was for wealth and glare.

I don't know whether or not you young men think of it or how you think of it; but the standing, the prestige, the respect which you have, the laws which exist in the State of Arkansas and in the United States, be they as meager as they may be, the privileges which you have to ply your profession, the knowledge which you have in that profession, the standing which you members have in this and every other community, is directly the result of the efforts of the brave men who have gone before, and who have given the practice of medicine its high standing. That is a debt of gratitude which you and I, and which the generations coming on after we are gone, can never repay. You may laugh at the shortcomings of these men, but I tell you they were heroes. No greater heroes mark the halls of fame than the hard-working doctors in their little way, who swam rivers and crossed creeks, and did everything in their power, without remuneration oftentimes, to be life-savers in the State of Arkansas.

Gentlemen, many of those men are gone, and we come today to read the names and solemnly utter our tribute of respect for each and every one of them.

I hope it may not come soon, but some day familiar faces out before me now, men that I have known for twenty-five years, will be gone, and somebody will be standing here or in some other hall where this society may meet in annual session, paying them respect.

If you want your name to live, don't write it in gold; don't write in monuments of stone, but write it on the hearts of men. These, our departed dead, in the medical profession, have written their names deep on the hearts of the citizenship of the State of Arkansas. I am going to ask the Secretary to read the names.

List of Deceased Members.

T. H. Bowles, Dumas, May 21, 1920.
W. C. Forbes, Hot Springs, Aug. 26, 1920.
A. G. McAlister, Cash, September 7, 1920.
J. A. White, Dumas, October 7, 1920.
B. E. Dixon, Texarkana, December, 6, 1920.
C. W. Sillin, Stuttgart, Dec. 18, 1920.
D. A. Jackson, Vick, February 18, 1921.
Wm. T. Gabbert, Fayetteville, March 21, 1921.
L. H. Merritt, Forrest City, April 8, 1921.
J. W. McClendon, Hot Springs, April 12, 1921.
J. M. Daly, Little Rock, April 17, 1921.

Dr. Mann: Now, ladies and gentlemen, if there is anything here that you wish to say,

on any one of these deceased members, we would be glad to hear from you.

On motion of Dr. Pettus, members stood in silence reverently for a brief period as a mark of respect for the deceased members.

On motion, the Memorial Session adjourned.

PUBLIC HEALTH SESSION.

Tuesday, May 3, 1921.
8:00 O'clock, P. M.

Dr. C. W. Garrison, State Health Officer, Chairman, called the meeting to order.

Dr. Garrison: We are very fortunate this evening in having with us a gentleman whose name does not appear on the program. By special request, not of the speaker, but of several other citizens, he has been asked to make a statement just at this time. I take very great pleasure in introducing to you one of Arkansas's most foremost statesmen, Col. Fordyce, of Hot Springs. (Applause.)

Col. John R. Fordyce: I certainly appreciate the introduction, but this is the first time I ever knew I was a statesman. What I would like to say to you is this: Hot Springs is a place that should be, in my opinion, given over entirely to the doctors, not only tonight and during your meeting, but for all time to come. Nature has done so much for Hot Springs that I feel that we ought not to turn this resort over to a bunch of gamblers and race-horse people. I feel that the doctors should establish here in Hot Springs one of the greatest clinics in the United States. (Applause.) Of course, there are a good many that don't agree with me, live here in Hot Springs, and who think my idea is more or less hazy, but I know what the National Government has planned for this place, if we will co-operate with them, that such a clinic will be established. Already we have the Army and Navy Hospital, we have the large Catholic Hospital and the large Jewish Hospital and we are now constructing for the Public Health Service a free bath house and a free clinic, which is to be operated by the Army, Navy, and the Public Health Service. I feel that we need more things here along that line. Perhaps you all remember reading recently that Congress has passed a law establishing five large hospitals for the ex-service men, and it has been our effort to try to locate one of these hospitals here. I have just returned from Washington, where I had a conference with nearly everybody that I could see and talk to, that I thought might have some influence on that subject; and I found that the Public Health Service people are almost unanimously in favor of locating one of their hospitals here, of course there is a good deal of log-rolling going on and political efforts being made, especially from my friend, Dr. Taussig's town of St. Louis. They are trying to locate one of these hospitals up there, but I feel that this is a much better place. I used to live up in St. Louis, and I know what a terrible climate they have got up there and how it is full of smoke and everything else that is more or less disagreeable. But, if they should ever come down here, I feel that they wouldn't even consider St. Louis. So, on my trip to Washington, I found that Oklahoma, Texas, St. Louis, through Major Kiel, and nearly every other section of the country are trying to get one of these hospitals located in their particular places. Some of these people have been up there three or four weeks with a lot of printed propaganda and other influences, which were being brought to bear to get the authorities to locate these hospitals in those places. Dr. Sawyer, the President's personal physician, thinks Hot Springs should be the place. He thinks, however, that the Government has spent so much money on cantonments, that some of these old cantonments might be used for the location of one of these hospitals. I tried to talk him out of that, and persuade him that the cantonments were about the last place that they ought to send anybody to try to get them well; that the boys who had been there had been subject to so much rigid military discipline and had such a hard time that even to go back there now would make them sick, if they were well. And, I feel that they would, with all those dilapidated buildings, old discarded, roads, and deserted places around there, that it would be a pretty bad thing to send anybody there and try to get them well.

I would like to have the doctors of Arkansas, if they feel that they could, to endorse Hot Springs as a proper place for the location of one of these hospitals. And, if they come here, we will give them all sorts of assistance. We will do the building for them, and do everything that we can, because we think Hot Springs is the place for that hospital.

Of eourse, it is not a place for a tuberculosis hospital, but, for venereal diseases and probably the diseases brought here to bathe, we feel that it is the best place that you could have for them.

If you gentlemen could see fit to endorse such a movement, I would appreciate it very much. (Applause.)

Dr. Caldwell: Mr. President, in regard to that matter, and in relation to Arkansas in general, and to Hot Springs in particular, I wish to introduee the following resolution:

Whereas, The United States Government contemplates the erection of a reconstruction hospital for the Southwestern District of the United States, and

Whereas, Hot Springs, Arkansas, is pre-eminently adapted for such an institution, from the viewpoint of location, climate and its hot springs; therefore

Be It Resolved, That the Public Health Section of the Arkansas Medical Society here memorializes the State Medical Society, during its next general session, to bring this matter to the attention of the Locating Commitee.

Dr. Cothern: I wish to second Dr. Caldwell's resolution.

Adopted.

Chairman Garrison: We will depend on you, Dr. Caldwell, to see that the society is apprised of this action, and that resolution turned over to the House of Delegates.

Dr. Winegar: I would like, just for a moment, to ask for a word of privilege. Inasmueh as Col. Fordyee has publicly declared these facts, we feel that the men in authority should understand. He not only impressed those people with the fact and made them realize that we have the best site and ground spaee, but he even offered his high-grade serviees gratuitously to engineer it and supervise the building, and look after those matters. On a building that would cost us probably two million dollars, the arehitect's fees alone would amount to a fabulous sum, and Col. Fordyee offered them that as an indueement to bring this hospital to this place. I think that we should not overlook that, and that, if he could do that mueh for this proposition, we should certainly give it another boost.

Chairman Garrison: I think myself that Col. Fordyce is entirely too modest. He did not tell you besides that this project involves about two and a half million dollars, and that the Surgeon General of the Army, the Surgeon General of the Navy and the Surgeon General of the Public Health Service, President Harding and President Harding's physician, are all intereseted in making this the clinical center of the United States, and establish here a staff seeond to none, and this staff is to be drawn from these various arms of the service, from the Navy, Army, and Public Health Service and from the eivilian physieians of the country. I think that would be one of the greatest eredits and one of the finest and best tributes that could come to this State, and whieh would greatly benefit the profession as a whole.

The Arkansas State Teaehers' Assoeiation was so kind and graeious as to invite the Arkansas Medieal Society to appoint a delegate to represent the Arkansas Medical Society at the State Teaehers' Assoeiation meeting. Also, it appointed a eommittee to confer with a similar committee from the Arkansas Medical Soeiety to draft eertain resolutions looking to the betterment of school conditions, medical inspeetion, sanitary service, etc., espeeially in the rural distriets of Arkansas. You are very fortunate in having a Department of Education that is thoroughly in accord with the most modern of public health ideas, thoroughly in sympathy with the endeavors of the medieal profession, and, to that end, a representative from the Arkansas State Teachers' Association has been invited to appear on this program this evening. Mr. Woodward, of Morrilton, was to have filled that role, but a telegram recently received annoumeed the impossibility of his arrival. But, we have, to represent this Association in his plaee, a very able man in Mr. Whaley, from the Department of Edueation, and we shall be very glad to hear from him on Health Edueation in the Publie Schools. (Applause.)

Mr. N. M. Whaley: Mr. Chairman and friends of the Arkansas Medieal Society: I know as well as you do all about the disappointment that a substitute brings, but I can not help it. You know the substitute is always the beneficiary, and the others have to bear the disappointment. I think the condition probably could be expressed in no better words than I have heard expressed some few days ago in the remarks of a substitute, when he said, "Friends, I am glad to have the privilege and the honor of bringing to you a disappointment tonight." So, it's my privilege and honor.

While, my friends, there is so much difference between my profession and your profession, in a way, and, of course, a good deal of difference in a meeting of our Assoeiation

and your State Association, yet, I must say that I feel at home among you. I see quite a number of faces that are familiar, old-time friends, friends with whom I have worked and labored in different towns and in different highways and byways of the State. I hope these friends will be kind enough not to tell tales.

It reminds me of the story of the two darkies who were partners in a crime. One escaped; the other was captured, tried and convicted, and sentenced to a term in the penitentiary. The one who escaped went away to another State, and became a prominent minister. After the one who was sentenced to the penitentiary had served his sentence, he heard the story of his partner in crime, who had become a minister, and his success as a minister of the gospel, and he determined that he would go and investigate the matter. So, all unannounced, he went over to this town in which his partner was serving as pastor in the church, went right up Sunday morning and took his seat on the front bench. After the old preacher had read his scripture lesson, and announced his text, just as he raised his eyes from the book, he saw this partner down to his right on the front bench. After a short pause, wondering what he should do, he announced to his congregation: "Brethren and sisters, since I read my text, I have changed my mind. I invite your attention to the following new text, 'If thou recognizeth me, speak not. I will see thee later.'" (Laughter and applause.)

An educator and a prominent business man were standing gazing at the wonders of Niagara Falls. The business man said, "Behold America's greatest undeveloped power!" The educator said, "No. The young life of America is America's greatest undeveloped power." I believe, friends, that you will agree with me that the educator was right. We are glad, friends, to have you associated with us in this great work of developing Arkansas's greatest asset, we are glad to have associated with us your profession, with its influence and with its forces for doing things. We are particularly glad, friends, to be associated with you in one phase of this question, of this matter of developing the young life of Arkansas. I assure you, friends, that the State Department of Education and all the leaders of education are thoroughly committed to the matter of health and physical education. The war has made this question one of national moment, a matter in which the whole nation is intensely interested. They gave us a great shock—that shock has reached the teaching profession as well as the medical profession—when they showed us that 29 per cent of the men drafted were unfit for military service; when they showed us that at least one-half of the children have some physical ailment. I am glad to say that the percentage of men drafted from Arkansas that went into the service or admitted into the service was higher than that of quite a number of States. I noticed that 25 per cent only of our boys were rejected because of physical ailments. In some other States, as much as 46 per cent of them were rejected because of physical ailments. I don't know why that is. I leave that for you to ascertain; but we are committed to this matter of health and physical education. We are committed to it because we feel that it is right; we feel that we are under obligations as learners and teachers to see that the body is developed and cared for as well as the mind. In fact, I think we have Biblical basis for this. I think it was some of our Biblical writers, maybe it was Martin Luther or somebody else who said, "Glorify God with thy minds and bodies, which are His." And, he told us, too, or somebody told us, that, "the body is the Temple of the Holy Ghost." Because of these things, I believe that we ought to feel under obligations to care as much as possible for the body, its physical condition, and teach these things as well as other things. We are committed to physical education because of its direct bearing upon the mental training. We all know that the mind cannot do its work as it should do it, when the body is sick. So, one of our great mottoes is, "A sound mind in a sound body." We are committed to it also because of its relation to moral and social life. We all know that a sick man is just like a sick child. He is a troublesome and fretful person. He can't get along with you. He can't do anything to please you. All these things reflect upon society and upon moral life. Somebody has said that every man is a rascal when he is sick. So, we feel like we ought to be committed to this question of education because of its effect upon these things. We are committed to this also because of its econominal value. We are told that the preventable diseases and preventable

sickness not only that could be prevented, but that ought to be prevented, by all means, causes at least ten per cent reduction in the productiveness of our country, in the labor and the value of labor. I have an idea that that would pay the bill for preventing these diseases, to say nothing, of course, of the unhappiness that it causes. We are committed to this also because we feel that it is right; that every Arkansas girl and boy has a right to have this knowledge and this physical training that would bring to her and to him the happiness that health brings, and that would give them the place in society that a healthy person has, and that would render them effieient citizens that only healthy persons can be.

So we are committed to this problem of health and physical training. Now, the conditions in Arkansas make our attainments in this matter not just what we would like them to be. Only the larger cities have their regular physical directors in their school system. Only the larger towns have places for physical development and part-time teachers for this work. I suppose, the whole bill for physical training in Arkansas would not exceed $25,000.00, as far as the public school system is eoneerned. In the eountry, of course, there is practically nothing done in this line, the places where we need it the worst, in the eountry from which this true story comes, when the teacher said. "Johnnie, you are not fit to sit down by a decent boy. Come up here and sit down by your teacher." That is too true.

As to the condition of physical education in Arkansas, we feel just about like the brother did in his funeral oration over Rastus, one of his society brethern. He said: "Brethren, you all know Rastus. He was not always what he ought to be; but Rastus was a member of our society. You know Rastus. Sometimes he got mad, and he swore; but you know Rastus was a member of our society." He went on to enumerate different things about Rastus, but he says, "there is one thing we can say, all of us, about Rastus, one thing I want to say about Rastus, and that is this: I hope he is where I knows he ain't." (Laughter.) So that's all we can say about physieal education, as far as publie sehools in Arkansas are coneerned.

Now, we have a law that will permit the State Board of Education to look after this work and supervise the work and put it into the publie schools, if we only had the funds with which to do it. It is just simply a matter of insuffieient funds in our public school budget to earry on this part of the work. We tried in the last Legislature, or a reeent Legislature, to secure an appropriation for a State Supervisor of Physical Edueation. We had expeeted this State Supervisor to have the qualifications for direeting this work, and getting out a suitable manual to be plaeed in the hands of the teachers of the State, to direct them in this work, and also being enabled to supervise the building of new school buildings. We were not able to secure this appropriation, but we are preparing that manual, and we will have it published as soon as our July appropriation comes in, so that we will have some money with whieh to publish it. We will have this manual giving suitable directions for physical development for each grade in the publie sehools. We are also glad to announce, friends, that we have in operation now, efficient machinery for looking after this work in the rural parts of the country. I refer to our county superintendents of edueation. Sinee the first of the year, we have had county superintendents in every county of the State. These men will look after spreading this gospel of sanitation and health, and teaching it through the schools more effectively. They will look after enforeing the State Health Laws, so far as vaccination is eoncerned, and your health eertificates required of teachers, and all these things.

So we feel that we are really getting at this subject. We are making progress. At least we feel that we can report progress in this matter.

The State Edueational Association is definitely eommitted to this work. They have a speeial seetion giving speeial study to playgrounds and physical edueation, just like we have our science seetion, our history section, our mathematics section and things of that kind.

I am glad to say, too, that the federal government is committing itself to this work. We are hoping for the passage of the Towner Bill in Congress, which has been pending sometime as the Smith-Towner Bill, and which was introduced recently as the Towner Bill, since the republieans got Mr. Smith, but Mr. Towner is still there, and he has recently

reintrodnced this bill. Now this bill provides for the appropriation by the federal government of $20,000,000.00 for this special purpose of health and physical education, including dental and medical examination of school children. Arkansas's part of that appropriation would be something over $322,000.00. This, of course, would have to be matched by a like sum from the State, making something over $645,000.00 for this work. If we are successful in securing this federal aid, of course that will place you the educational forces and all in a position to take up this work with some degree of success.

Now as I said, we are in a position to co-operate with you, and your work. I appreciate what Dr. Garrison said with reference to the State Department in this matter. I hope we will make good in this way. Now, then, I don't know of anything definite that I could mention on this subject, unless I should suggest to you that the committee from the State Educational Association, which is a joint committee with your medical society for the consideration of physical education, would be glad to consider a proposition from your committee or from your society looking to securing this State Director of Physical Education. Since we didn't get the funds appropriated by the Legislature, if there should be any way possible to put on such a man to look after this work until the meeting of the next Legislature, it might be of some help to us in securing an appropriation the next time by co-operation, and in the meantime try to do as was done with reference to the work in behalf of illiteracy. In 1917, we secured the creation of an Illiteraey Commission; but there was no appropriation. The State Bankers and a good many other friends advanced this money until this last Legislature made a very handsome appropriation for illiteracy work in the State. So that if this association should see fit to instruct your committee with reference to a movement of this kind, this committee from the State Educational Association would be glad to co-operate with you.

I assure you that I feel like I should not take any more of your time. I am sure you have more business matters to look after. I thank you. (Applause).

Chairman Garrison: Our next number on the program will be by the "man with the smile," the sanitarian of the Rock Island Lines in Arkansas, Oklahoma and Louisiana. We will now hear Dr. Bradford on what he terms "The American Menace." (Applause).

Dr. T. B. Bradford: Mr. Chairman, Ladies and Gentlemen: Hot Springs has always been a very dear place to me. My first visit here was years and years ago when the old "Diamond Joe" ran down through the hills. I don't remember whether it was lighted by candle or a coal oil lamp. It looked like, when we lauded in Hot Springs, we had about reached the end. How different it is today, coming in on a palatial Pullman and a fast train, and thoroughly equipped with every modern convenience, and stopping at a hotel like the Arlington or the Majestic or a dozen other nice hotels that you have in your city. Hot Springs is a wonderful place. There is no other place in the world like Hot Springs. (Applause.) I was just wondering, as Mr. Fordyce was talking, why it would require any solicitation or persuasion on our part for the Government to locate one of our reconstruction hospitals at this place. I was very much disappointed, of course, that we didn't get to locate the crippled children's hospital in your city for the Shriners, which went to St. Louis. I am glad to be here this time; but in a few days we are coming down here to take what is left of Hot Springs. The Shriners are coming here, and the natives will have to leave. There will be two special trains from El Dorado. You all have heard of El Dorado. There will be two trains out of Memphis, one out of Pine Bluff, and two out of Little Rock to take their degrees. There will not be any room here for any but Shriners. I have always felt kindly toward Hot Springs, especially in the last eight or ten years. Your late mayor and I were reared in the same town in Tennessee and went to school together. Tennessee always furnishes the best of everything. I am an exception to the rule, however. I was very much pained to know of Dr. McLendon's death.

I have here some of your De Soto water in this bottle. That is not "moonshine," as the doctor says. I believe there is a little story told about "moonshine." Some judge out in Georgia was trying a negro man named Joshua. The judge said: "You are Joshua?" "Yes," he said. "You are the fellow that caused the sun to stand still, aren't you?" "No, judge," he said, "I am

not Joshua that caused the sun to stand still. I am Joshua that had the still that made the moon shine!'' (Laughter.)

I am going to, just for an introduction to my topic tonight, ask some one who is smoking to come forward and put a little smoke in this bottle. (Here Dr. Bradford proceeded to prepare a ''milkshake'' of the water and smoke.) Now, who in this audience will let me pour out a glass of this water and drink it? If there is one here, I would like to give him a glass of water. It is nothing but water and tobacco smoke. (As no one offered to taste it, Dr. Bradford proceeded.) I don't believe you think this water is all right. I do not blame you; but it is exactly what we get every day when we smoke in a closed room. We don't get the contaminated water; but we get foul air, and we breathe the air, just as we would take this water and drink it into our stomaehs, and absorb the nieotine.

I was recently in a home where a little baby had just arrived. It hadn't been in that home twenty minutes until the father proceeded to start a smudge by lighting a ''rope'' cigar, and I will give you my word, grown people could hardly stay in the room. Still he expects that little child to develop and grow to the proper consistency. I just make this illustration before I start with my paper.

I eall this the ''American Menace.'' Not as some of yon might have understood from the program, the Japanese question or some other menace. But, I think the tobaceo question is the American menace today. (Applause.) Now, what I say this evening, I hope none of my doctor friends will take any exception to. I am not talking to you. I am talking to the other fellow. As Prof. Whaley has said, the hope of this country does not lie in me and you doetors; it lies in the coming generations. And, if we don't watch out, we will be weighed in the balance and found wanting.

Before I go into this subject, I want to say to you that the last Legislature of which your distinguished orator today, Walter Ebel, was a member—and he did valuable work for us np there — passed a cigarette bill, or rather a tobacco bill, whiehe precludes the giving away or the sale of tobacco to minors. Now, you all know that we had a cigarette bill on the statute books that prohibited the sale of eigarettes to anybody, but that wasn't worth the paper it was written on. We repealed that bill, and we passed a bill that prohibits the sale of or giving away of tobaceo, and eigarettes is ineluded, to minors, except by a ehild's parents or guardian. The eireuit judges over the State, and the proseeuting attorneys, say that they will enforce that bill. Now, it is up to you people to see that the merchants who handle tobacco do not sell to minors. This bill doesn't prohibit the sale to grown people. I am a great believer in grown people doing as they please. I never voted for prohibition at any time in my life. It is nothing to be smart about, but I will tell you: if you want to eradicate any evil, eommence with the child, as these parents today are neglecting to impress upon the children the faet that tobacco is the rankest poison in materia medica, except prussie aeid. If they did, I think they would all quit it. As I say in this paper, one thousand five hnndred boys eommence the use of tobacco every day in the United States.

(Dr. Bradford's paper will appeear in a later issue.)

Chairman Garrison: There are still other menaces, ladies and gentlemen, one that is not limited to America, but it is world-wide. Dr. Taussig, Regional Director of the Southwest Division of the American Society for the Control of Cancer, will now address you on ''Whose Fault Is It That Cancer Is Not More Frequently Cured.''

Dr. Fred J. Taussig, of St. Louis: Ladies and Gentlemen: There have been so many nice things said about St. Louis this evening, that it is up to me to say some nice things about Hot Springs, only the hour is so late and I could not possibly express all the nice things about Hot Springs I would like to in the short time available. I certainly hope that all the hospitals that are not established in St. Louis will be ereeted in Hot Springs. (Applause.)

(Dr. Taussig's address appeared in our May issue.)

Chairman Garrison: It has been suggested that probably some would like to ask questions. If so, the doctor would be very glad to answer them for you. If not, as chairman of this section, I am going to take the liberty of extending to the gentleman from Missouri a very deep appreeiation in behalf of the section and of this audience. We are very glad to have you deliver this message to us tonight. The section is now adjourned.

GENERAL SESSION.

First Day.

The General Session was called to order at 2:00 o'clock p. m. Tuesday, May 4, 1921, by Dr. Warren, President.

Invocation by Rev. Chas. E. Collins, of the St. John's Episcopal Church, Hot Springs:

Almighty God, the giver of every good and perfect gift, we beseech Thee to let Thy blessings of guidance and strength to rest upon this Association of men who are gathered together in the interest of suffering humanity that pain may be relieved. We beseech Thee to bless all of their deliberations with the power of the Holy Spirit, for, without Thee we can do nothing. Grant them, as they go here and there alleviating pain and distress, that they may feel themselves truly Thy servants and instruments in Thy hands, for from Thee cometh the skill with which they can do their work. Give unto them, we beseech Thee, the virtues of patience, kindly hearts and love, and grant that, in all of their works, they may seek Thy honor and glory, and the good of humanity. Bless their absent ones, and let Thy blessing, we beseech Thee, rest upon all those throughout this world who minister to the sick and who bring comfort and cheer to those in distress. Let unity prevail in the deliberations of this Association, and may Thy peace, the peace which the world cannot give, rest upon all those who minister here and elsewhere. We ask this, and the outpouring of Thy strength and goodness upon these physicians, in the name and through the merits of Jesus Christ, the great physician of body and soul. Amen!

President Warren: We will have the Address of Welcome for the city, by Hon. Walter Ebel, of Hot Springs.

ADDRESS OF WELCOME.

Mr. Ebel:

Mr. President, Officers and Members of the Arkansas Medical Society:

It is with the most profound appreciation of the importance of your organization to the citizenship and the laity, as individuals, that I, at this time, on behalf of the citizens of Hot Springs, extend to you a most cordial welcome to our city. Hot Springs, if it desires anything, very much desires that it be appreciated by the medical profession of the State. We are glad to have you here, because we want to get in closer touch and contact with your very eminent colleagues in this city, who have done much to place Hot Springs in the foremost ranks as a health and pleasure resort. It was in 1832 that the Government set aside these acres here as a sanitarium for all time for suffering humanity. Since that time countless thousands of persons have come here and have found that solace, that peace and comfort, and that benefit in these wonderful, God-given, radio-active hot waters. And, we believe that, in no small measure, does the future of Hot Springs depend upon the high appreciation and, I might state, the just appreciation that you men of the medical profession have relative to our hot waters. We have not only a beautiful city here, but we have a clean city. There has been a time when Hot Springs, gentlemen, did not possess the prepossessing attributes that it does now, when conditions that would prevail naturally in various health and pleasure resorts existed here. But, the members of the Garland County Medical Society realized that such conditions could not obtain where progress and civic purity were concerned, so they were no small factor in bringing about a decided change for the better. We have a city here so that any resident coming from another place can subscribe his or her name upon the hotel register with pride, and say, as the Apostle Paul once did, that "they are citizens of no mean city."

We are glad to have you here because we realize that, in your hand is the health and the safety in no small degree of the one million, six hundred and some thousand souls in Arkansas. We realize that you are doing a great work. We know that you exemplify and typify the science and the art of healing.

And, if I may digress just for a moment at this point, it seems to me that, if this old world of ours needs anything at the present time, it is a miracle man or miracle men that will be able to bring out of the chaotic conditions that have followed the great world war, something akin to healing of the public mind, for industrial conditions the world over are anything but satisfactory. And, as we look back upon the events that have transpired in recent years, we wonder why the American people have not learned, as we believe they should have learned, the lesson of peace, happiness and prosperity. When you consider that this nation of ours is furnishing practically one-third of the manufactured goods to the world, one-third of its agricultural products, and also one-third of its mineral resources; that previous to the war we were a nation that owed other countries five billions of dollars, and yet emerged out of that great world conflict as the greatest creditor nation, with other nations owing us twelve billion dollars, and when we consider the strife and the turmoil and struggles that our boys have gone through, there should come into the hearts of men a desire for peace and unity and a yearning for something that might be applied to the benefit of humanity such as the service and art of healing.

Your organization is an important one to Arkansas. We have a most wonderful State, and you as individuals, and in your respective spheres in your communities and in your association, are doing a great work to advance the interests of Arkansas. And, when we consider the great volume of the products and resources of the State, why, it is with pride that we can refer to the fact that we are natives of Arkansas. And, the chief advertisement for Arkansas, as viewed from the Hot Springs mind, is this wonderful little city that nestles so peacefully and happily now in the lap of the picturesque and historic Ozarks.

We are mighty glad to have you here. We want you to have a good big convention. I have looked over with interest your program. And, it will be my very great pleasure to materially assist in the publicity of your convention, for I represent not only the Gazette, but shall look after the publicity for the local papers, for the Commercial-Appeal and for the Associated Press. I want to be of service to you gentlemen while you are here. And I, like every other resident of Hot Springs, want your convention to be so good, so big and so beneficial, that when the gavel shall have fallen for the last time, when you shall have returned to your respective homes, you will look back upon this meeting, and, turning again the pages of memory's book, refer to this convention and say it was good to have been here. I thank you. (Applause.)

President Warren: We will now have the Address of Welcome on behalf of the profession by Dr. J. L. Greene.

ADDRESS OF WELCOME FOR THE PROFESSION.

Dr. Greene:

Mr. President and Members of the Arkansas Medical Society:

It was a most gratifying pleasure that came to me when asked to extend the welcome of organized medicine in Hot Springs and Garland County to you on this the occasion of your annual meeting. The pleasure was, however, tinged with regret that the member of our local society who had been originally selected for this duty found it inconvenient to carry out the plan. I regret that you have been deprived of the pleasure of hearing Dr. Minor at this time, for you are missing a rare treat of wit, wisdom and eloquence, and being required to hear only an indifferently prepared substitute.

The profession in Hot Springs extends to you a most cordial welcome and congratulations. We welcome you because we are glad to have you come here that we may have an opportunity to repay in part some of our obligations, favors and courtesies of the past, when we have visited some of you in your homes and have there been made to feel that to your hospitality we are not strangers. We would, therefore, repay in kind, as far as in us lies, during your brief stay here. Come to our offices and be at home; while you remain, business will be suspended and we will feel honored by your presence.

We congratulate you that you are to have a brief respite from enervating responsibilities of your daily grind. The practice of our blessed and beautiful profession brings more of joy than any other labor to which men and women may give the efforts of a lifetime. To our care and guidance are committed the mysterious sacraments of birth and death, with all the sad and tender relations of humanity; but it entails days of labor, nights without repose, and all too frequently without material reward. It seems good and proper, therefore, that for a time you should put aside care and responsibility that you may rest and renew the acquaintance and friendships of other years, while participating in the scientific program of the meeting that must and will be helpful to all of us for the coming year. We congratulate ourselves that you have selected this city for the meeting, and hope we may be able to contribute to the pleasure of your stay. Permit me to say again that, on behalf of my fellows here, we extend a most hearty welcome. (Applause.)

President Warren: We will now have the response to the Address of Welcome on behalf of the Arkansas Medical Society by Dr. F. Vinsonhaler, of Little Rock.

RESPONSE TO ADDRESSES OF WELCOME.

Dr. Vinsonhaler:

Mr. President, Ladies and Gentlemen:

Mark Twain, I believe, said that the surest road to fame consisted in being good to newspaper men. I have had the pleasure of listening to the very eloquent and interesting address from a member of the newspaper fraternity, in bidding us welcome to this city. I have also listened to a response by Dr. Norwood, in the House of Delegates, and another welcome by our distinguished friend, Dr. Greene. I am reminded of the fact that I should have written my address, perhaps, in order that I might be circumspect and not say those things which I should not say. My excuse will be the one given by an old Hardshell Baptist minister one time. I asked him if he ever wrote his sermon. He said, "I do not. I do not. Why," he said, "when you write your sermon, the devil is looking over your shoulder, and he knows what you are going to say; but if you get it up without any preparation at all, the devil himself doesn't know what you are going to say." (Laughter.)

I intended to say something about radio-activity. (Laughter.) I have heard that mentioned several times since I have been here. I heard Sam Jones once make the excuse for perhaps my present attitude upon that question by telling a story about an old doctor near Cartersville, Ga. This doctor was sitting in his office one day, and an old negro came in and said, "Doctor, I know's you is a human doctor, and you don't doctor mules, but I's got a mule, me and Mandy, and dat's all we has got; and dat mule am sick. Won't you please give me something for dat mule?" The doctor, rather out of the kindness of his heart, gave him a teaspoonful of calomel. "Now," he said, "Amos, when you get back home, you put this calomel in a quill and pry that mule's mouth open and blow that down just as far as you can." "I thank you, doctor, thank you." About three days later the doctor had a call to go out and see the old negro. He found him in bed covered with bed quilts, very sick. Amos said, "Doctor, it was the *mule* that was sick; but it's *me now.*" "What's the matter, Amos?" asked the doctor. "Well," he said, "you done tol' me to take dat cal'mel and put it in a quill and blow it down de mule's throat. I took de mule and pried his jaws open, but dog-gone dat mule, he blowed fust." (Laughter and applause.)

So, the eloquent and distinguished gentleman has beaten me to radio-activity. He has "blowed fust." (Laughter.)

I will not take this occasion to dwell upon this as I would desire to do. Many reasons have been given as to the condition of things at the present time, which comes from the great war, the stress of financial conditions, and the opportunities under which we work. At this troublous time, the most troublous, perhaps, in the history of this country, so many things, so many problems, present themselves to us, that we hardly know which way to turn. But, it seems to me that, out of it all, the best solution will come. We have that belief deep down in our hearts, though it is a disappointment sometimes, to view political and financial conditions; but it is best to put them all behind us. There is an old inscription over an inn on the Rhine in a little town called Andernach, which has been there for a long, long time, and worth repeating:

"Look not mournfully into the past; it comes not back again. Wisely improve the present; it is thine. Go forth to meet the shadowy future without fear, and with a brave heart."

Now, I will say that we are all glad we are here. We know that we are welcome; we knew that before we came. I don't know that we have ever gone to any place in Arkansas that we haven't felt that we were welcome, and we always felt that way when in Hot Springs. We have partaken freely of the radio-active water. We can feel the molecules of the radium vibrating inside of us. We can hear it saying to one cell, undergoing metabolic changes, "Get a move on you! If you don't, we are going to can you!" We can hear it saying to another cell, "Well, you are all right; we will pass you." But, after a while it strikes a diseased cell. There goes the label on it, "Inspected and condemned."

We are glad that we are able to drink the radio-active water. We regret that the Spaniard, when he stood upon these hills and looked at all these beautiful valleys in his search for the fountain of immortal youth, didn't know of this, for, if he had lingered here, I am satisfied that he would be alive now. (Laughter.)

And, the only reason, I believe, that doctors die in Hot Springs is, perish the thought! that some of them don't drink the water. (Laughter.)

Brethren, we are glad we are here. We give you the right hand of fellowship. We know, expect and believe that we are going to enjoy every moment of our time. I thank you. (Applause.)

Chairman Cothern: We will now have the President's address.

(President Warren's address was printed in our June issue.)

Third Vice President Cothern (presiding): I will appoint as the Committee on President's Address, three of our past Presidents, Dr. E. F. Ellis, Dr. M. L. Norwood, and Dr. Geo. S. Brown.

President Warren: Mr. C. P. Loranz, of Birmingham, Ala., business manager of the Southern Medical Association, is here, and we shall be pleased to hear from him.

Mr. C. P. Loranz:

Members of the Arkansas Medical Society, it is a pleasure to be here and I consider it a great honor to have been introduced to you. I am the "hired man" of the Southern Medical Association, the only paid officer of the Association, and I give all of my time to that work. In the nine years I have been with the Association this is the first time I have had the privilege of really enjoying a medical meeting. I am always so very busy at our own meetings I do not have time to enjoy them. But I am here with nothing to do but to enjoy your meeting, to meet old friends and, I hope, to make new ones.

The Southern Medical Association, as all of you know, will meet in this good city of Hot Springs next November and we expect to have a very large and successful meeting. I believe we will have from 1,500 to 2,000 doctors of the South here at that time. We are depending on the organized profession of Arkansas to do everything they possibly can to make our meeting a success. We will be your guest as well as the guest of the Garland County-Hot Springs Society, for it was your invitation together with theirs that brought the Association to Arkansas and to Hot Springs.

The Southern Medical Association is strictly a scientific organization. It has no legislative functions. The question of medical ethics is left entirely with you and your county societies. All questions of legislation are left with you and the American Medical Association. Only those who are members of their State and county medical societies can become members of the Southern Medical Association. Every member has an equal voice in all the deliberations at our annual meetings. We believe we have an organization which should appeal to the members of the organized profession of the South. When we come to Hot Springs in November we hope to come with a program that will have much of interest in it to every doctor in the South—the sixteen States from which the Association draws its membership.

I hope every one of you, together with many more of your good Arkansas doctors, are going to be here again in this good city of Hot Springs next November. (Applause.)

Chairman Cothern: The next will be a paper with some lantern slides, by Dr. Hugh McKenna, of Chicago.

Dr. Hugh McKenna: Mr. President and Members of the Arkansas Medical Society: I feel that I should beg your indulgence for presenting this subject, a rather tiresome one to the average doctor; yet, at the same time, it seemed to me to be one on a very much neglected subject. There is some question now as to whether we are going to have socialism of State medicine. If I may digress for just one moment to say, we are going to get away from State medicine; because I think it is the worst thing for a community. We are going to do it more by thorough and more effieient work, particularly in certain branches. This, I believe, as the late Dr. John B. Murphy said a short time before his death, is one of the subjects that certainly needs more efficiency and thorough attention to detail.

(Dr. McKenna's paper will appear in a later issue.)

Chairman Cothern: The next paper is one by Dr. A. E. Chace, of Texarkana.

(Dr. Chace's paper on "Industrial Medical Department of the Future," will appear in a later issue.)

Chairman Cothern: It was my pleasure to visit the St. Louis Medical Society a few weeks ago, where I attended one of the meetings of the Surgical Section. This afternoon you will have the pleasure of listening to one of the men of that body, Dr. Fred J. Taussig.

Dr. Taussig: Mr. Chairman, Ladies and Gentlemen: The chairman's oration is perhaps too big a one for the short time that I am going to give you this afternoon. The special subjeet that I have seleeted is "Recent Limitations in Operative Gynecology."

(Dr. Taussig's paper will appear in a later issue.)

Chairman Cothern: The section for this evening is called off on account of the absence of Dr. R. E. Gramling.

On motion the General Session adjourned until afternoon of May 5.

GENERAL SESSION.

THIRD DAY OF MEETING.
Thursday, May 5, 1921.

The General Session was called to order by the President, Dr. Warren, at 3:30 p. m.

Dr. Eberle: I have the report of the Reference Committee to present, if it is in order.

REPORT OF REFERENCE COMMITTEE.

We, your Reference Committee, beg leave to report as follows:

We endorse the several recommendations in the annual address of the President.

We most heartily commend the able report of the Committee on Cancer Research, and think this committee should be continued, in order to further spread its educational campaign; for only by continuous propaganda can best results be accomplished.

We concur in the report of the Committee on Hospitals, in the main, but question the advisability of making the entrance requirements for nurses in training schools so strict as to work a hardship on the small hospitals of the State.

The other reports being oral can only be approved in a general way.

J. G. EBERLE, *Chairman*
C. H. CARGILE,
THOS. DOUGLASS,
Committeee.

On motion adopted.

Dr. E. F. Ellis: I have the report of the Committee on President's Address.

REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS.

We, your Committee on President's Address, beg leave to report as follows:

We regard the address as unique in character and of great historical interest to the members of the Arkansas Medical Society. We believe the Society owes Dr. Warren a lasting debt of gratitude for the gallant fight he helped wage before the recent meeting of the Arkansas Legislature. This was done by him at a decided professional and financial loss. He was ever alert and showed great activity in trying to secure much needed medical legislation, and, while fate was against us during the past legislative session, we feel sure his efforts will prove to be "bread cast upon the waters," and that the fight will be kept up by him and others till we get what is due to our profession and the people of Arkansas.

We advise that his recommendations relative to child welfare be placed in the hands of a legislative committee, with instructions to secure, if possible, legal enactments covering his suggestions.

E. F. ELLIS, *Chairman,*
G. S. BROWN,
M. L. NORWOOD,
Committee.

On motion, adopted.

President Warren: The next in order is New Business. We will have the introduction of the new officers elected. I will appoint Dr. Caldwell and Dr. Eberle, as Dr. Mann is not here, to bring Dr. Cargile up to the rostrum.

Gentlemen, your President, Dr. Cargile, who was elected to serve for the following year.

Dr. Cargile: Mr. President and Gentlemen of the Arkansas Medical Society: This is an honor that I appreciate very much, notwithstanding that I have never desired it. I thank you, gentlemen, for what you have done. But, let me explain. At Jonesboro, about eighteen years ago, without my knowledge, I was made one of the three nominees for President. At the time I asked them to withdraw my nomination. My reason was this, as I stated then, not that I didn't appreciate the honor, not that I didn't appreciate what my friends did, but I, better than they, knew my weaknesses and my limitations. I knew my very temperamental, emotional nature, which makes me try to avoid being conspicuous. If you have made a mistake, if I don't make good, I ask you to bear with me and take part of the censure on yourselves, as you and not I made the choice.

President Warren (addressing the new President): It becomes my pleasure to deliver to you this gavel, presented to the Arkansas Medical Society by Pine Bluff, or, in reality, Dr. Lemons presented this gavel at last session. I now entrust it to your keeping.

Dr. Cargile took the chair.

Secretary Bathurst: We have an invitation from Little Rock as a place of meeting, but it comes through the Chamber of Commerce. I think we should also have the invitation supplemented by one of the delegates from Pulaski County.

President Cargile: That will be better, but we appreciate the other.

Dr. Dooley: On behalf of the Pulaski County Medical Society, we extend to the Arkansas Medical Society a cordial invitation to meet with us in 1922 for its annual meeting.

President Cargile. Are there any other invitations? If not, all in favor of meeting next year at Little Rock as the guests of the Pulaski County Medical Society, will say so.

Dr. Barlow: I move you that we accept the invitation from the Pulaski County Medical Society to meet in Little Rock.

Seconded. Carried.

Dr. Kirby: I want to make a motion that we extend our thanks to the Garland County Medical Society for its kind and very efficient entertainment, to the Arlington Hotel, and the commercial organizations of the city of Hot Springs, and to the citizens, especially the ladies of this city, for their kindly efforts in our behalf. (Applause.)

Seconded. Carried.

On motion the Arkansas Medical Society adjourned sine die, at 4:30 p. m.

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All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deatbs, removals from the state, changes of location, etc., are requested.

Editorials.

OUR NEW PRESIDENT.

Dr. Charles H. Cargile of Bentonville, whose photograph appears in the front section of this issue of the Journal, is the new President of the Arkansas Medical Society and in thus honoring him the Soeiety is itself honored to have so distinguished a presiding officer. Dr. Cargile has at all times not only taken great interest in organized medicine, but he never has shirked his share in the Society's development. He has served on important committees, has contributed valuable artieles to medical literature, is a Fellow of the Ameriean College of Surgeons, and served on the Exemption Appeal Board of the Western District of Arkansas during the war. If only by way of recognition of his serviees to the Soeiety, to his profession and to his country, his election to the Presideney would have been a fitting and well earned tribute, but in addition he brings to the offiee an experienee in the work of the Soeiety whieh insures an efficient administration.

Dr. Cargile may be said to be almost a native Arkansan—he only missed it by a year. Born in Georgia in 1853, his parents moved to Clark County, Arkansas, the following year. He graduated in medicine from Jefferson Medical College in 1877 and began to practice his profession in Okolona, Arkansas. In 1893 he moved to Bentonville where he has since resided and where he has built up an extensive practiee and where he has taken prominent part in all movements for the betterment of the community. He has done post-graduate work in Philadelphia, New York, Brooklyn, St. Louis and Rochester, Minn.

He was married in 1878 to Miss Fannie S. Sloan of Arkadelphia.

SOUTHERN MEDICAL ASSOCIATION MEETING.

It is timely to eall attention to the Annual Meeting of the Southern Medieal Association at Hot Springs, November 14-17. In a way the Arkansas Medical Society is sponsor for the Southern Medical Association for this meeting. Last year at the annual meeting the Arkansas Society officially joined the Garland County (Hot Springs) Medical Soeiety in extending the invitation and at this year's annual meeting we officially expressed appreciation of its acceptance, so that it is our duty to help make the meeting a suceess and do all that is possible to entertain our visitors and make them want to come again. Many of the members of the Arkansas Medical Society also are members of the Southern Association and such members are especially under obligation to attend and assist in every way. The Southern Medical Journal for June in an editorial on the subject says:

"The physicians of Arkansas desire it understood that the entire organized medical profession of the 'Traveler' State will be host to the Southern Medical Association next November."

With the members thus pledged we must do all that our visitors have been led to expect of us and we feel sure there will be no disappointment. The members of the Garland County Society are already making plans for an attractive program and elaborate entertainment. Among the tentative plans are a series of clinics in the large Government Hospital. There probably will be elinies on the teehnic of spinal neurologieal syphilis, on malaria, the chronic arthritides and orthopedic surgery. Because of the year round presenee

of patients from all over the country who come to the Spa for its medicinal waters, it is believed that no city in the world can supply more and better clinical material on these subjects.

To attend such a medical gathering can only redound to the benefit of the physician. We hope every member who can possibly attend will do so for his own benefit and we urge all our members to attend as a duty to our visitors.

THE SCIENCE THAT SAVES VERSUS THE SCIENCE THAT DESTROYS.

Dr. G. A. Warren of Black Rock, our retiring President, in his annual address at the May meeting, called attention, in a most interesting manner, to the great strides taken in the science of medicine in the last forty years. He referred to the demonstration of the germ theory of disease, the experiments which led to the banishment of yellow fever, of the various serums used in the cure and prevention of contagious diseases, of Pasteur's discovery, of the advances made in sanitation and, in general, of the progress in the science of healing with the subsequent saving and prolonging of human lives.

But there is a dark side to this beautiful picture.

The most ancient mythologies tell of warring spirits, of beneficent gods and malevolent devils, of good fairies and evil imps; always one force tearing down as the other builds. Against the efforts of the science, which ever strives to prolong or save lives and alleviate suffering, is that other science which strives to kill and wound and cause suffering, the science of war. For every life saved by medical science by reason of its wonderful progress made in the last forty years, referred to by Dr. Warren, how many whole men were slain or mutilated in the last war? The devil of war can in a day kill and maim more than the angel of medicine can save in a decade. Thousands of our ablest physicians and surgeons were used in war to patch up the broken wrecks which yesterday composed the flower of a great nation, the prospective fathers of a coming generation of still better men. Not only does this devil of war destroy men by taking only the physically perfect to make the great fighting machine, the weaklings are left to become the fathers of a weaker generation.

The adepts in this science which destroys use their scientific attainment in inventing new forms of killing, new deadly gases, which, let loose like the evil genii of the Arabian tales, may kill whole communities, women and children, non-combatants at one fell swoop. We read of a new projectile to carry a five-ton missile 300 miles. There is no end to the frightful inventions and discoveries which have for their object extermination of the prospective enemy. It makes one fairly shudder to read of them and to wonder if the science of healing is worth while when the opposing science merely exists to furnish more victims.

Is it not time to call a halt when a plan is proposed to use medical science as a means of frightful slaughter? Read what is quoted by James Oliver Curwood in his latest book, "God's Country," of developments of plans whereby whole nations will be infected by plagues:

And then consider he writes the words of one greater military scientist of the English-speaking race:

"Germ warfare was tried on a small scale in the late war and its results have been promising. The methods of its use was in poisoning water supplies with cholera and typhus germs and the loosing of dogs inoculated with rabies and of women inoculated with syphilis into the enemy country. *Here apparently is a promising beginning from which vast developments are to be hoped for.*"

When a military scientist calmly talks of such frightfulness as promising "hopeful results," well may we ask has the world gone stark mad? To conquer an enemy he would afflict humanity for generations yet unborn and undo the work the science of healing for a century. Yet we shudder and condemn German frightfulness while a great military scientist of the English tentatively plans for future warfare. We boast of our civilization, of our Christianity; we speak with horror of the cruelties practiced by savage people; we send missionaries to civilize them, to teach them the religion of peace on earth, good will toward men, while our highly civilized men of science intensify their efforts toward perfecting plans for slaughter and disease-spreading devices and disease-disseminating schemes the cruelty of which never were conceived by the most savage people on earth!

Personals and News Items.

Dr. H. F. Williams of Ozark has moved to Gotebo, Okla.

Dr. and Mrs. Charles T. Black of Thornton recently visited in Little Rock.

Dr. A. T. McKinney of North Little Rock has moved his office to the new Exchange National Bank Building, Little Rock.

The Tri-State Medical Society (Tex.-Ark.-La.) will hold their next meeting December 7, 8, 1921, at Shreveport, La. Dr. Frank H. Walker, Shreveport, President.

Those interested in attending or wishing to contribute to the program should address Dr. Nettie Klein, Secretary, Texarkana.

In the election of Dr. Wm. T. G. Morton to the Hall of Fame the allied profession of medicine and dentistry have been singularly honored. By their overwhelming vote the Electors have evidenced the appreciation of the public at large for the beneficence of anesthesia.

The proposed Public Health Institute which the Service contemplated holding in Washington, D. C., during the fall of 1921, has been indefinitely postponed. This action has been decided upon after several conferences between officers of the Service and officers of the American Public Health Association.

The Fiftieth Annual Meeting of the American Public Health Association is to be held in New York City, November 14-18, 1921. Several other activities are planned by the Association in connection with their semi-centennial meeting in November, 1921, and it was at the request of the American Public Health Association that the Service institute for next fall was abandoned.

The Service hopes that it will be possible to arrange to hold a similar institute in Washington during the spring or fall of 1922.

We have just read a copy of the first issue of the International Journal of Gastro-Enterology, which we heartily recommend to the specialist and general practitioner. We believe the commentaries, such as appear in the issue (July) are highly instructive, practical and scientific.

The Journal is printed on light buff India paper which is very restful to the eyes, and makes reading a pleasure.

The Journal will promote the formation of an International Association of persons interested in all problems relating to gastro-enterology and allied sciences. The editor, is Dr. A. L. Soresi, address 220 West 59th Street, New York. Subscription price, $6.00 per annum.

At a recent organization meeting of the Arkansas Medical Board of Examiners, Dr. W. F. Smith of Little Rock was elected President. Other officers elected were: W. H. Toland, Nashville, Vice President; J. W. Walker, Fayetteville, Secretary; J. T. Palmer, Pine Bluff, Treasurer; J. A. Bogart, Forrest City; J. C. Swindle, Walnut Ridge, and H. A. Ross, Arkadelphia. Previous to the organization of the new board, the old board met in an adjourned session and after transacting routine business adjourned sine die. The members of the old board who retired were: Drs. H. H. Henry, Eagle Mills; E. F. Ellis, Fayetteville; O. D. Ward, England, and T. J. Stout, Brinkley. They were succeeded by Drs. Walker, Palmer, Swindle and Ross, who were appointed recently by Governor McRae upon the recommendation of the Arkansas Medical Society at its meeting at Hot Springs May 5.

Recently at the annual dinner of the American Anesthetists in Boston, during the A. M. A. week, Dr. S. Adolphus Knopf, a leading advocate for the honoring of Morton, said it would be a proud privilege for the Associated Anesthetists to place a bronze bust of Morton in the niche assigned him by the Electors. This is to be done on October 16, in celebration of the Diamond Jubilee Anniversary of Morton's first public demonstra-

tion of ether anesthesia.

The Associated Anesthetists, as well as other prominent leaders of the allied professions are, therefore, urging all those interested to make a substantial contribution for this purpose.

Kindly send your check or money order at once to

Yours appreciatively,
F. H. McMechan, M.D., *Sec.-Treas.*
Associated Anesthetists.
Lake Shore Road, Avon Lake, Ohio.

THE BOSTON SESSION.

The Boston session of the American Medical Association of 1906 was most notable and successful from every point of view. It set the pace for attendance up to that time—over 4,700. This year's meeting also will be regarded as successful and splendid from every point of view. The registration—5,506—was the third largest in the history of the Association. The entertainments were ideal and particularly appropriate to the historical interest attaching to Boston and its vicinity. The scientific sessions, without exception, were well attended. This is the second year of the new arrangement regarding section meetings, and there was evidence of the fact that the Fellows have realized that the scientific work covers Wednesday, Thursday, and Friday, rather than Tuesday, Wednesday and Thursday, as obtained prior to last year. The Commercial Exhibit was unusually attractive, stimulating and instructive, including displays of all the newer mechanical aids to diagnosis and medical practice. The Scientific Exhibit, both in volume and quality, was excellent and its location made it easily accessible—consequently well attended. The weather was perfect. To add to the pleasure of those who attended was the cordial welcome everywhere extended by the local profession and the public. Too much praise can not be given to the Local Committee on Arrangements. The courteous attention given to visitors, the co-operation available to both officials of the Association and of the sections, the character and liberality of the entertainments—all resulting from the efforts of the local committee—were the vital factors in making the Boston session of 1921 a conspicuous success.

Dr. George E. de Schweinitz of Philadelphia was elected President, and St. Louis was selected for the meeting place for 1922.

Obituary.

DR. B. L. HILL.—Benjamin Levin Hill died at Stuttgart June 19, 1921, aged 52. He was educated in the Little Rock public schools and lived here for many years, graduating from the University of Arkansas, Medical Department, 1891. Dr. Hill is survived by his wife, six children, two sisters, and three brothers.

DR. LEVI DAWSON CRAWFORD died at Drakesboro, Ky., April 6, 1921, of angina pectoris, brought on by over-exertion. He was born in Fannin County, Georgia, July 1, 1863, and moved to Arkansas when a mere lad. He graduated from Barnes Medical College of St. Louis March 20, 1894; practiced medicine in Eastern Oklahoma and Arkansas for a number of years, more recently at Marked Tree. He leaves a wife and two children, C. F. Crawford, of St. Louis, Mo., and Mrs. A. Powers, of Marked Tree.

DR. WALLACE CALVIN ABBOTT.—Dr. Wallace Calvin Abbott, who died at his home, 4605 North Hermitage Avenue, Chicago, at 1:30 a. m., July 4, was born in Bridgewater, Vermont, October 12, 1857. His early education was obtained at the State Normal School, Randolph, Vermont, the St. Johnsbury Academy, St. Johnsbury, Vermont, and Dartmouth College, Hanover, New Hampshire. Coming west, he worked his way through the University of Michigan, winning his degree as Doctor of Medicine in 1885. The following year he engaged in the practice of medicine in Chicago, building up a large practice on the North Side and winning many friends.

It was during this time that Dr. Abbott established the Abbott Alkaloidal Company, now known as The Abbott Laboratories of which firm he was President continuously

from the time of its establishment, more than thirty years ago, until his death.

For several years previous to his decease, Dr. Abbott had been in ill health. Anticipating his active retirement from the large and successful business which he had founded, he placed the conduct of The Abbott Laboratories largely in the hands of his older employees, under a generous co-operative reorganization plan on which it has been operating for more than two years.

Dr. Abbott was a man of broad vision and great energy. He was an organizer of rare ability, warm-hearted and beloved by his employees, business associates and hundreds whom he had befriended.

Dr. Abbott was a pioneer in the field of alkaloidal medication. He labored incessantly through his writings, and personal contact with thousands of physicians, to bring about a more careful study of the patient, and the treatment of separate symptoms as they developed, as contrasted with the older methods of treating by disease names only. His influence upon the medical profession in this respect has been profound.

Dr. Abbott was a co-author, with Dr. Wm. F. Waugh, of several medical books, including "The Practice of Medicine," and "Positive Therapeutics." He was, also, editor-in-chief of the American Journal of Clinical Medicine, now in its twenty-eighth year.

For the past five years Dr. Abbott has encouraged extensive research work along the line of new medicinal chemicals. As a result, a number of the remedies, formerly made only in Europe, are now manufactured by The Abbott Laboratories.

Dr. Abbott was a member of the Ravenswood Methodist Church, the American Medical Association, the Illinois Medical Society, the Chicago Medical Association, the Medical Editors' Association, American Drug Manufacturers' Association, American Pharmaceutical Manufacturers' Association, Ravenswood Lodge 777 A. F. & A. M., the Oriental Consistory and the Shrine.

He leaves a widow, Clara A. Abbott and a daughter, Eleanor Abbott.

County Societies.

HEMPSTEAD COUNTY.

(Reported by W. G. Allison, Sec.)

The Hempstead County Medical Society held its regular meeting at Hope, June 2, 1921, in the parlor of the Josephine Hospital.

Present: Drs. Cannon, Garner, Kolb, Lile, Weaver, Russell, Allison and Stidham.

Papers were read by Drs. Kolb, Garner and Stidham. Interesting and instructive discussions followed each paper.

LAWRENCE COUNTY.

(Reported by H. R. McCarroll, Sec.)

The Lawrence County Medical Society met in regular session at the City Hall at Hoxie, at 4:00 p. m., June 1, 1921.

The meeting was called to order by the Secretary and Dr. G. A. Warren was elected President pro tem.

Some questions bearing upon wrong terms, misnomers in current literature were asked and discussed, all of which related to modern medicine.

Dr. G. A. Henderson of Imboden was the essayist for the afternoon and gave a most excellent paper on the subject of "Exophthalmic Goiter" and the medical treatment of same. A general and helpful discussion followed.

Present: Clay, Hatcher, Henderson, Land, Hughes, McCarroll, Robinson, Thomas, Townsend and Warren.

JEFFERSON COUNTY.

(Reported by J. T. Palmer, Sec.)

The Jefferson County Medical Society held a regular session on June 7, 1921, with the following present: President, J. F. Crump, presiding; Hankinson, John, Jordan, Lemon, Troupe and Woodul.

Dr. John presented two cases, one quite interesting in which a large ventral hernia had to be closed at about the third day after birth. Dr. Jordan presented a case of Peritoneal tuberculosis which was operated, patient lived one year and died of anascara. Dr. Breathwit reported two cases, one of malignancy of malar bone and one of necrosis

of the malar bone. Dr. John also reported a case of nephritis following whooping cough.

The Society unanimously endorsed the efforts being put forth to establish a clinic in Pine Bluff, and petitioned the mayor and city council to elect the present County Physician as City Physician so that no discord could arise as to where or to whom the county and city wards should go to be treated.

Adjournment.

FRANKLIN COUNTY.

(Reported by Thos. Douglass, Sec.)

The Franklin County Medical Society held the regular meeting May 10, 1921, present: Drs. Hansberry, Williams, Post, Porter, Davis, Hyden, Blackburn and Douglass.

Dr. Hansberry was elected President pro tem. On request of Dr. King, a resolution was adopted supporting House Bill No. 285, which provides for care of disabled emergency officers on the same basis as the navy and marines.

"Ectopic Gestation" was discussed by Dr. Post and others with report of a case. The delegate to the State Society reported his attendance at the Hot Springs meeting. Dr. H. F. Williams who was soon to leave for Gotebo, Okla., was called on for remarks. Dr. Williams spoke of the help the Society had been to him and the cordial relations with the members. Several of the members talked of Dr. Williams' departure and said many kind things with regard to him, and regretted his going.

The regular meeting was held June 14, 1921. Present, Drs. Gammill, who presided; Post, King, Hansberry, Davis and Douglass. The principal subject discussed was, "How to deal with delinquent accounts," and after much painful discussion the matter was referred to a committee.

Some of our members attended the May meeting of the Crawford County Medical Society at Mulberry and enjoyed very much mixing with that genial bunch of good fellows, as well as the excellent fish dinner they served at Dr. Wigley's home.

LAWRENCE COUNTY.

(Reported by H. R. McCarroll, Sec.)

The Lawrence County Medical Society held its monthly meeting in Walnut Ridge, July 6 at 4:00 p. m., in the office of Dr. J. C. Land.

After the meeting was called to order and the usual formalities, Dr. Earl Thomas reported a case of human anthrax which became infected through a sore on the man's arm after holding an autopsy on his cow, and after his fever came up, and a physician was summoned, the local sore looked like a small-pox vaccination. The arm was soon swollen to the size of the thigh and the temperature ranged around 105 degrees for some time. Fifty c. c. of anti-anthrax serum was administered intravenously every twelve hours until three doses had been given when the temperature dropped. The man slowly recovered, being some two weeks in getting well. There was a large slough at the seat of the infection.

J. C. Land and was the essayist for the afternoon and read a paper on "Gonorrheal Urethritis and its Complications," which was an excellent paper and reflected much credit upon the writer. The discussion elicited was very helpful and was generally participated in.

Dr. Buford, of Memphis, was present and took an active part in the meeting, which was enjoyed by all present, and extended us an invitation to meet him and our good friend, Dr. Wm. Johnson, at Hardy, on the first Wednesday in August. The Hardy health resort will be in its prime by that time and the entire First District Medical Society will be invited. If any one in this district wishes to be honored by having a place on the program, he will please write me or Dr. Thad Cothern at Jonesboro. If any of the physicians at Little Rock wish to be placed on the program, write me at once.

President Ball; Buford of Mimphis, as visitor; Land, McCarroll, Swindle, Thomas, Townsend and Warren.

Book Reviews.

MATERNITAS.—A book concerning the Care of the Prospective Mother and Her Child. By Chas. E. Paddock, M. D., Professor of Obstetrics, Chicago Postgraduate Medical School. For sale by Cloyd J. Head & Company, 304 S. Dearborn St., Chicago. Price, $1.75.

The author of this book clearly explains many perplexing questions which present themselves to the prospective mother during her pregnancy which she frequently considers hardly necessary to discuss with her physician. It will be found helpful to the busy physician since it is not intended to be a medical guide.

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Original Articles.

RECENT LIMITATIONS IN OPERATIVE GYNECOLOGY.*

By Fred J. Taussig, M.D., St. Louis, Mo.

In the history of medicine the present time will doubtless be recorded as the age of surgery. For several decades the indications for operative treatment have been extended to cover almost every conceivable form of disease, and practically every organ, even the heart, has been made approachable for the application of surgical measures. Wonderful as the progress of surgery has surely been, we should not ignore, on the other hand, those counter-currents working toward the limitation of operative treatment. We who are engaged in surgical work, are perhaps inclined to over-estimate the benefits to be derived from operative treatment. Only too often we fail to see the end results of our work, and are inclined to interpret the satisfactory operative recovery as indicative of the final outcome. I venture to predict that in another generation some of the apparently brilliant results of surgical work will be surpassed by other forms of treatment that are not, like surgery, attended by the removal of important organs; but are confined to the cure or relief of the disease itself. Plastic surgery will doubtless remain as useful or more useful than before but the surgery of excision, particularly where it affects organs the continuance of whose function adds to the health and happiness of the individual will become more and more limited.

If in this paper I take my examples from the field of gynecology, it is not that these principles of surgical limitations are to be applied solely in this field but because my own experience has been more particularly along this line of work. What I am about to say about pelvic infections is equally true of certain types of infection in other organs; and the advantages of non-operative treatment in certain forms of uterine tumors, applies with equal weight to the treatment of new growths about the lip and jaw.

Three groups of cases will serve to illustrate the tendency to limit operative treatment:

(1) Pelvic infections.
(2) Fibroid or metritic uterus.
(3) Cancer of the cervix.

(1) *Pelvic Infections* have long been a battleground for the opposing forces of conservative and radical elements. Every conceivable method has been advocated. All varieties of partial or complete excisions, done vaginally, abdominally or by some combined method, in the acute, the sub-acute or the chronic stage of the disease, have their vogue. Only as the end-results of our work began to be tabulated and analyzed did it become apparent that many a woman with a fair sized inflammatory mass still encapsulated in her pelvis was better off physically and mentally than her comrade whose pelvic organs had been removed for a similar condition several years before. We also had occasion to note repeatedly that time and the forces of nature heal many wounds. Large masses of exudate are at times absorbed in a few weeks with the result that conception and child-bearing can again take place. Furthermore, we have all had occasion to observe, when the adnexa of one side were removed, that a few years later the other adnexa would have to come out; and, where both adnexa were excised, the uterus would give rise to symptoms requiring removal; and where all the pelvic organs were removed, that the patient would have symptoms due to adhesions or neurasthenia.

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

The surgical treatment of pelvic infections has therefore proved to be no unmixed blessing. My own feelings in the matter is that only in the rarest instances are we justified in operating during the first attack of pelvic infection. A definite pelvic abscess should be lanced but the diffuse exudates in the broad ligament or about the tubes should always be treated by rest, hydrotherapy and other conservative measures. When after a period of months there is no permanent diminution in the size of the pelvic mass, or there is a tendency to recurrent attacks of pain and fever, we must consider operative measures. In all such instances we should try tentatively prolonged rest in a hospital under proper local treatment. If such a plan is carried out conscientiously and the patient observes reasonable care after leaving the hospital, fully three-fourths of the cases of pyosalpinx can be tided over without operation. If an operation should, however, prove necessary, I advise you to follow the technique described in Polak's recent monograph on "Pelvic Inflammations." This is especially applicable where one ovary is in reasonably good condition and consists of the removal of both tubes, one ovary and the fundus of the uterus. This permits of the continuance of the important functions of ovulation and menstruation while reducing the chance of a recurrence of infection to a minimum. Occasionally the more dangerous complete hysterectomy is justified, especially if the cervix is badly torn or diseased.

(2) *Fibroid or Metritic Uterus.* Until the advent of radium and deep x-ray therapy, all but a few very small fibroids were operated on. Now, it might almost be said all but a few very large fibroids are not operated upon but treated by radiotherapy. The work of Kelly, Clark and Jeff Miller has sufficiently proven that we can count with reasonable certainty on a symptomatic cure by radium in the uncomplicated cases of fibroids that lie in the pelvis or lower abdomen. What is true of fibroids, applies with even more force to the metritic or chronically subinvoluted uterus, the type that produces menorrhagia at about the time of menopause. These cases formerly were curetted (usually without relief of bleeding; because the lesion was not in the mucosa, but in the wall of the uterus itself), and then were subjected to vaginal or abdominal hysterectomy. Almost 100 per cent of these operations can now be avoided by the intra-uterine use of radium at the time of the curetment. The results are uniformly satisfactory.

In the case of fibroids, I believe we are justified in varying our treatment to some degree according to race. My experience is that as a rule the Caucasian woman will seek advice earlier and will less frequently have pyosalpinx or other complications. Her fibroids form later in life and do not seem to grow so rapidly. Furthermore, it seems to me that she is more apt to develop post-operative thrombophlebitis after hysterectomy. Hence radiotherapy is to be preferred to operation in this race. The negress, on the other hand, get her fibroids earlier in life; they are numerous, grow rapidly, and are often complicated with gonorrheal pus-tubes. I find myself therefore treating the majority of fibroids in white women by radiotherapy and subjecting most of the colored patients to a partial or complete hysterectomy.

One of the great advantages of radiotherapy is the simplicity and safety of its application. It does not add materially to the risk of the exploratory curetment, which, in my opinion, should almost always accompany it, in order to exclude the possibility of malignant change. This factor of simplicity and safety induces many persons to have the condition corrected in its early stages rather than delay until complications, either in the adnexa, the heart or the kidneys, have made treatment more serious.

Looking back over the past three and a half years in which I have used radium treatment for fibroids in selected cases, I have been impressed with the promptness with which the patient has followed the prescribed treatment and the practically uniform success attending these measures. In many of these cases I would not have felt justified in recommending a hysterectomy, because the size of the tumor and the character of the symptoms did not justify it. I did, however, feel it right to suggest a radium treatment, in order to hold the fibroid in check and eliminate those symptoms of increased menstrual flow that had begun to appear. Many of my patients frankly told me that they were willing to take such a treatment; but did not care to have their uterus removed for a condition

that was not malignant and might never grow much worse. It is reasonable to predict that if at the present time about 50 per cent of fibroids are suitable for radiotherapy, this will be increased to 80 or 90 per cent in the next ten years; for more and more patients will learn to come to the doctor early in the disease, knowing that if taken at that time they can avoid the dangers and sequelae of a laparotomy.

Before leaving this chapter on fibroids I want to express my decided preference for radium over x-ray. In most instances a diagnostic curetment is done to exclude malignancy and the radium can be applied intrauterine at that time. In a certain percentage the radium can be applied successfully as a vaginal pack. Rarely is more than one application necessary. I have cured several cases with radium where x-ray had been previously used by good men without relief.

(3) *Cancer of the Cervix.* It chanced that while studying in Vienna in 1901, I had occasion to get a position in the hospital of that great apostle of the radical operation for uterine cancer, Prof. Wertheim. What I saw there, convinced me that while the primary mortality was high, this procedure alone gave a good chance for permanent cure. Becoming an enthusiastic advocate of the radical operation on my return, I employed it in a considerable percentage of cases of cervical cancer, even though much of my material at the Barnard Free Skin and Cancer Hospital and the city institutions comprised well advanced cases. In the course of these fifteen years I have had an opportunity of estimating the results of these operations and I am free to confess they are rather discouraging. Not more than a half a dozen of those that have passed the five-year limit have remained cured and these have been with but one exception the early cases with the cancer limited to the cervix. Of the many cases of partial involvement of the broad ligament, or vagina, practically all are now dead, though a considerable number were granted a respite of from one to four years relief by the operation.

My experience with radium comprising 109 cases of uterine cancer, dates back only three and a half years, so that I cannot yet speak of final results or permanent cure; but my impression thus far of the outcome coincides with the experience of those abroad and in this country who have used radium for a longer time. During the year 1920 a considerable number of gynecologists reported their five-year results of radium treatment in cervical cancer. I recently took occasion to analyze all the five-year results thus far recorded. This analysis was published in the December number of the new American Journal of Obstetrics and Gynecology as a collective abstract and I would refer those of you who are interested in the more detailed figures to that article. A total of 1,114 cases of cervical cancer treated solely with radium five or more years ago by twelve different gynecologists in Germany, Spain, Sweden and America showed 223 patients alive and well at the present time, a percentage of cures of exactly 20 per cent. In other words, one out of every five cases of cervical cancer taken without selection as to the stage of the disease can be cured with radium alone. This corresponds almost exactly with the final five-year results obtained with the radical abdominal hysterectomy for cervical cancer. In figuring these percentages we must include all cases of cervical cancer that present themselves for treatment, no matter whether treatment is given or not, no matter whether the case is early or far advanced. The number of persons examined and found well after five years is taken as the final result. These absolute percentages of cure alone tell the story of the effectiveness of any method of treatment.

It would appear therefore that the results obtained with the radium equal those obtained by operation. A closer analysis of the operable cases alone will give some additional information. In most of these clinics from 1913 to 1915 every case of cervical cancer, no matter how early a case it was, was treated with radium alone. This gives us a fair basis of comparison between the results of radium and operation. The reports from the clinics of Bumm in Berlin and of Doederlein in Munich, comprising over 250 operable cervical cancers treated with radium and an equal number treated by operation, were especially adaptable for purposes of comparison. They showed that in early cancers of the cervix with the disease limited absolutely to the cervix, radical operation gives better results than radium. In the so-called border-

line cases, however, where the parametrium, or vagina, was even slightly involved, and where in former years we would still have recommended hysterectomy, the results with radium alone are so much better than with operation that we are no longer justified in recommending surgery. The use of radium before and after operation will doubtless be an additional advantage in early cases in preventing recurrences. Massive x-ray treatment should also be given in combination with operation in most instances.

To summarize then, I would recommend that the following limitations in operative gynecology be generally adopted for the good of the patient:

(1) Pelvic infection should be treated by prolonged hospital rest and thermo-therapy and should only occasionally require operative removal of the affected organs.

(2). Metritic uteri and fibroids of the uterus that do not extend more than half way to the umbilicus and are not otherwise complicated should be subjected to radiotherapy in preference to surgical removal.

(3) Only the early cases of cervical cancer where the disease is definitely limited to a portion of the cervix should be subjected to operation. All the remainder are given a better chance for life and health by the proper application of radium to the diseased organ.

ORATION ON THE HISTORY OF MEDICINE.*

By C. S. Pettus, M.D., Little Rock.

The history of medicine has been developed through channels different from that of other subjects. The makers of the history of medicine did not receive notoriety and spectacular demonstrations for their discoveries, investigations and scientific theories, nor were they arrayed in pomp. It was for the sake of humanity that they were inspired to work without thought of self-aggrandizement. This purpose makes their work sacred and places it on a high plane of honor.

It was by investigating minds and sacrificing hearts that this history was developed, through observations, experimentations and deprivations that it was written.

Every name that is prominent among us sacrificed worldly pleasures and comforts to reach his goal. In making his investigations he depended largely on experimental processes on the human body to reach his conclusion and to perfect a means for its further protection. The doctor is practically the only one who manifests interest in the noted men of our profession.

The history of medicine deals only with men who have made scientific discoveries, and, being devoid of fiction, it is not interesting ordinarily to the layman. The layman, as a rule, is therefore unacquainted with the work and hardships undergone for the perfection of our present protection from disease, insuring its cure and the prolonging of life.

All progression or development that advances research and discoveries must have their opposition in order to give it the stimulation necessary for perfection. Commercial, political and literary achievements are usually developed with the promise of renown, pecuniary gain or other advancement in some particular way to the promoters; but it is different with the doctor. He advances scientific discoveries and his mission is to benefit humanity. His code of ethics demands an unassuming dignity. To advertise and praise himself would destroy his purpose. Charlatans and patent medicine manufacturers are therefore better known to the public than renowned and progressive scientific doctors.

From this we get something of an idea of the earnestness and determination of our masters and of their great vision and love for humanity. In their unpretentious manner they diligently pursued their course in silence, protecting human life, willing to perform this important work at all hazards. They lived and toiled in the realm of the divine. Sacred gods and goddesses were their companions. This association was so invigorating to their souls that they too became sublime, adding a luster and strength to the profession that shed an influence that will live forever. The phantasmagorial effect reflecting from their lives will ever be a Banquo's ghost to the quack. As the quacks gather round their debauching banquet table of fraud and dishonor the spirit of these masters of medicine will repeat to them the story of Belshazzar, "thou art weighed in the balance and found wanting."

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

The crudeness in the beginning of some of our most important discoveries and the false reasoning of their promulgators in certain instances, though obvious, is accompanied with sufficient truth to justify the pursuit. The determined scientist is thereby stimulated to continue his quest, and, through persistence and constant application, to obtain an impetus that assures his ultimate success. The doctor has thus gradually so approached the point of perfection that today he can speak with some degree of authority.

Hippocrates is known as the father of medicine. Mythology tells us that Aesculapius was known as the god of medicine, also that Apollo was considered the father of Aesculapius and the chief god of healing, and is commonly called the "averter of ill." It was believed that with far darting arrows he could visit plagues and epidemics upon mankind and could at need avert them.

There were also many tutelary divinities of medicine among the Greeks. Diana, Ceres, Mercury, Juno, Neptha and Bacchus were all of them patron gods and goddesses of the healing art, and were able at need to produce disease or its cure. While classically educated people know these divinity doctors of Mythology, only a selected few of our best educated people know about such real doctors as Eustachius, Fallopio, Wirsing, Malpighi, Sylvius, Peyer, Brunner, Stenson, Glisson, Mayon, Sydenham, Wiseman, Van Deventer, Winslow, Meckel, Scarpa, Hunter, Charcot and Claude Bernard. These are a few of the doctors who have builded the foundation of our present day medical teachings. Their names are common on the pages of physiology and anatomy.

The history of Austria during the reign of Empress Maria Theresa is well known to the readers of history. They know about Joseph the Second, about Kaunitz, the great diplomat, of Marshall Daun, the unfortunate Marie Antoinette and numerous others; but few know about Von Sweeten. This master of medicine developed the famous Vienna School of Medicine. He was the first to impressively emphasize camp hygiene for the protection of the army and to introduce through his persistency, over the protest of the Empress, vaccination in Austria, the greatest single factor of educating the people of Europe in the necessity of protection against smallpox. He was the first to suggest internal administration of bichloride of mercury for syphilis.

The history of Napoleon is known to the most superficial student, although his favorite physician, Jean Nicolas Corivisart, is unknown even to the ranks of the medical profession. It was this physician who was of the greatest value to the development of Napoleon and who made his war record possible through his scientific knowledge and his application of Von Sweeten's teachings and his development of Auenbrugger's great discovery of percussion. It is a beautiful story how Corivisart brought out the value of Auenbrugger's early teaching of percussion and well demonstrates Corivisart's nobility and grandeur of character.

Leopold Auenbrugger, physician in chief to the hospital of the Holy Trinity at Vienna, in 1751 tested and tried out the value of percussion of the chest. His little book is the first record of the use of immediate percussion of the chest in diagnosis based upon observations verified by post mortem examinations. His discovery was slighted and even snubbed by De Haen, Sprengel and others and remained unnoticed until Corivisart took it up in 1808, one year before the author's death. Although Corivisart might easily have revamped the idea of percussion as his own discovery, he says with fine feeling that he would not sacrifice the name of Auenbrugger to his own personal vanity. "It is he and the beautiful invention which of right belongs to him that I wish to recall to life," said Corivisart. Auenbrugger himself was too well poised and serene by nature to worry about his posthumous reputation.

As a matter of interest it may be well to refer briefly to the studies of a few masters of medicine in Europe during the seventeenth and eighteenth centuries.

Kircher, a Jesuit priest, was probably the first to employ a microscope. He was also the first to record an experiment in hypnotism.

Malpighi was the founder of histology. Reyne de Greaf of Holland was the first to study the pancreas. Sydenham was the reviver of the Hippocratic methods of observation and experience and was the stimulating influence to develop internal medicine in England during the latter half of the seventeenth century. Wiseman played the same

part in English surgery that Sydenham did in internal medicine.

Van Deventer of Holland practiced obstetrics and orthopedics in the seventeenth century and has been called the father of modern midwifery. Following Van Deventer comes Van Roonhuyse, a champion of Cesarean section, which he seems to have performed several times with success. He also illustrated with copper plates his mode of incision and gave reports of extra uterine pregnancies and ruptured uterus.

De Reaumur considerably advanced knowledge of digestion by experiments upon a pet kite, in which he succeeded in isolating the gastric juice and demonstrated its solvent effect upon food. This was in 1752, about one hundred years before Claude Bernard.

Meckel and Muller practically developed comparative anatomy, while Scarpa and Hunter gave new promises for further development of anatomy.

Sussmilch largely developed vital and medical statistics, bringing together much data of importance in public hygiene, life insurance and national polity. Blumenbach is the real founder of public hygiene.

Peter Frank was the first to signalize the importance of diseases of the spinal cord and define diabetes insipidus.

Morgagni, who died in 1771, gave the first description of syphilitic aneurysm and disease of the mitral valve, also early cases of acute yellow atrophy of the liver, tuberculosis of the kidney, the first recorded case of heart block (Stokes-Adams disease) and identified the clinical features of pneumonia with solidification of the lung and emphasized the extreme importance of visceral syphilis.

Thomas Young of the seventeenth century was not regarded as a successful physician because he studied symptoms too closely, although his treatment was admitted to be effective. He has been termed the father of physiologic optics.

Floyer revived the forgotten lore of Galileo, Kepler and Sartorius in trying to get the pulse rate by timing its beat with a watch which ran exactly a minute. The clinical thermometer was revived by him in his classic essays and observations (1746).

Baillie of Scotland made the first attempt to treat pathology as a subject by itself, describing the morbid appearance of each organ in systematic successions as in modern textbooks. It is said that he ruined his health by devoting sixteen hours daily to his studies and extensive practice.

Wm. Harvey, who died in 1657, proved the circulation of the blood.

Meibom in 1667 demonstrated the conjunctival glands.

Duvesney made some important investigations of the inner structure of the ear which led him to write the first treatise on otology (1683).

Among the doctors who added much to modern medicine none deserves more credit than Virchow, Cohnheim, Pasteur, Koch, Klebs, Metchnikoff, Loeffler, Lister, Von Esmarch, Graefe, Senn, Tait, Crede, Finger, Marion Sims, Jenner, Romberg, Ehrlich, Kocher, Lane, Gorgas, Price, Murphy, Deaver, and Robt. T. Morris, all of whom are to the history of medicine what Napoleon, Wellington, George Washington, Lincoln, Grant, Lee, Jackson, Lloyd George and Wilson are to the history of nations.

One of the most disastrous impediments to modern day progression of scientific medicine is politics. The first noteworthy record of this curse recorded in America was in 1775, in which year John Morgan was appointed by Congress Director General and Physician in Chief of the American Army. On accepting his commission he insisted upon rigorous examinations for medical officers and upon subordinating the regimental surgeons to the hospital chiefs; but the enmity of his subaltern and the shiftiness of politicians led to his unjust dismissal by Congress in 1777 and the appointment of Shippen in his place. Morgan made a public statement ably defending himself with all loyalty to the cause and his great chief, demanding at the same time a court of inquiry. He was so impressive in his statement that he was granted this request. After an investigation and two years of deliberation the court honorably acquitted him of all charges; but from this ordeal he was left poor and broken in spirit.

Such a spirit was again asserted during our late State Legislative Assembly by political legislators, influenced by the chiropractors, to defeat a bill introduced by the profession of our State asking for one medical examining board for those wishing to practice medicine in Arkansas, and regulating the practice

of medicine on a basis of science. In some respects this recent political outrage was worse than the imposition of dear John Morgan. Certain individuals were dragged into the fight through the influence of the chiropractors' labor organizations, which were indirectly used to whip certain legislators into line against the bill. These individuals thereby gave their endorsement to an unscientific cult and prostituted labor organizations. This act reverses the principles upon which labor organizations were founded.

At the meeting of the Committee on Medical Legislation to determine the merits of the bill, members of the labor organizations in conjunction with an eclectic physician and the leading chiropractor of the State combined and packed the meeting.

Through these means the chiropractors easily controlled the political element of the legislative committee. The leader of the chiropractors especially demonstrated his political ability and showed that one who makes a study of politics and schemes is superior at such a meeting to scholars of science. Through his manipulations he was represented as a graduate of a medical school and his achievements and wonderful cures were testified to at this meeting. He is a graduate of the law department of the University of Arkansas; but on applying for entrance to the medical department of the University, he was rejected because of his inability to meet the educational requirements. At the meeting before the legislative committee he not only controlled the political element of that committee and packed the room with his advocates, but also employed an able lawyer to represent the chiropractors' interest.

We shall not do as John Morgan, ask for vindication of ourselves with public statements. Our only recourse is to educate the people. Unfortunately, while we wait for vindication the crime of these defrauders and deceived legislators will be written in blood, through preventable suffering, deformity, poverty and death of humanity.

This experience should be a lesson to doctors and the intelligent voters of our State. It shows the necessity of electing educated, honest, and progressive legislators in order that humanity may be protected.

The above mentioned incident emphasizes a discussion in the A. M. A. Journal April 2, 1921, by Dr. Chas. A. Pinkham, Secretary of the Board of Medical Examiners of the State of California, saying in part: "As the chiropractor educates the public so should the medical profession educate the masses that they may have a clearer perception of the effect of disease, the cause of disease, and the prevention of disease. This campaign of education should convince the public that an individual untrained in the diagnosis of communicable disease is a serious public menace."

Quackery has existed and has thrived at intervals since the beginning of time. Certain beliefs and superstitions have become ingrained in humanity and can be eradicated only through the kind of public enlightenment which teaches that prevention is better than cure. The present leading lights of physical destruction in our State are chiropractors and exponents of Tanlac. It is consoling to know that all quacks finally fall by the wayside and pay the price of misstated promises. A chiropractor is entitled to the same consideration scientifically as a Chinaman socially. (Applause.) When compared with Christian Science I consider the chiropractor a fraud and the Christian Scientist as a fanatic.

The present quackery is a parallel to Herodatus' description of the methods of teaching the sick in his time. He describes it as follows: "They bring out their sick to the market place for they have no physicians there. Those who pass by the sick person, if they have suffered in a similar way or have seen others so affected, confer with him and advise him to have recourse to the same treatment as that by which they escaped a like disease, or as they have known to cure others." Mesmer, whose remarkable reputation as a quack is known throughout the world, attempted to make a demonstration of his ability to cure the blind, Theresa Van Paradies, in Vienna, during the reign of Empress Maria Theresa. His imposition was so apparent that he was compelled to leave the city within twenty-four hours. The populace was with him and considered the treatment he received an outrage.

William Read, who started out as a tailor, hired some one to write a book on eye diseases under his name, and a mercenary poet to praise him in verse. This advertisement

attractied the attention of Queen Anne, whose bad eyesight made her an easy vietim of such an impostor, and, gaining her good graces, he was actually knighted and subsequently became oculist to George I.

The masterpiece in the description of a quack by Daniel Defoe is interesting and instructive, and I shall take the liberty to quote it in toto at this time.

"December 5, 1719.

"Mr. Mist—Passing oecasionally the other day through a little village, at some distance from town, I was entertained with the view of a very handsome equipage moving toward me. The gravity of the gentleman who sat in it, and the eagerness wherewith the eoachman drove along, engaged my whole attention; and I immediately concluded, that it could be nothing less than some minister of State, who was posting his way, upon some important affair. They were now got about the middle of the plaee, when making a full stand, the footman deserting his station behind, and making up abreast of his master, gave us a very fine blast with a trumpet. I was surprised to see a skip transformed so speedily into a trumpeter, and began to wonder what should be the meaning of such an unusual phenomenon; when the coachman, jumping from his box, laying by his whip, and slipping off his great coat, in an instant rose up a complete Merry Andrew. My surprise was now heightened, and, though honest pickle, with a world of grimace and gesticulation endeavoured to move my gaiety, I began to be very fearful where the metamorphosis might end. I looked very earnestly first at the horse, and then at the wheels, and expected every minute to have seen them take their turn in the farce, and, laying aside their present appearances, assume other shapes. By this time the gentleman, who had hitherto appeared wonderfully sedate and composed, began to throw off his disguise; and having pocketed all his former modesty and demureness, and flushed his forehead with all the impudence of a thorough-paced quack, I immediately discovered him to be a very eminent and learned mountebank.

"This discovery raised my curiosity as much as it abated my surprise, so that being very desirous to hear what new proposal the doctor had to make, or what new arcanum in physic he had found out, I quitted my former station, and joined myself to the crowd that incompassed him. After a short preamble, he began to open the design of his embassy, setting forth, at large, the great affeetion whieh he bore, in particular, to the people of that place; amplifying on his own merits and qualifications, specifying great numbers of cures which he had wrought on incurable distempers, expatiating on the extreme danger of being without his physic, and offering health and immortality to sale, for the price of a tester.

"You'd have burst your sides, Mr. Mist, had you but heard the foolish allusions, quaint expressions, and inconsistent metaphors, whieh fell from the mouth of this eloquent declaimer. For my part, I should have wondered where he could have raked up nonsense enough to furnish out such a wordy harangue, but that I am told he has studied the Flying Post with a great deal of application; and, that most of the silly things in his speech are borrowed from that excellent author. Sometimes he'd creep, in the most vulgar phrases imaginable; by and by he'd soar out of sight and traverse the spacious realms of fustian and bombast. He was, indeed, very sparing of his Latin and Greek, as (God knows) having a very slender stock of these commodities; but then, for hard words and terms, which neither he, nor you, nor I, nor any one else understand, he poured them out in such abundance, that you'd have sworn he had been rehearsing some of the occult philosophy of Agrippa or Rosicrusius, or reading a lecture out of Cabala.

"After the doctor had given such ample indications of the greatest humanity, skill, and erudition, who d' ye think would be so incredulous as not to believe him, or so uncourteous as to refuse to purchase one of his packets? Lest any of us, however, should be too tenacious of our money to part with it on these eonsiderations, he had one other motive which did not fail to do the business; this was, by persuading us that there were the seeds of some malignant distemper lurking in every one of our bodies; and, there was nothing in nature could save us, but some one or other of his medicines. He threatened us with death in ease of refusal, and assured us, with a prophetic air, that without his physie every mother's son of us would be in our graves by that day twelve-month. The poor

people were infinitely terrified, with the imminent danger they found themselves under; but were as much pleased to find how easy it was to be evaded; so that, without more ado, every man bought his packet, and turned the doctor adrift to pursue further adventures.

"The scene being now removed, I was at leisure to reflect on what had passed, and could really have either cry'd or laugh'd very heartily at what I had seen. The arrogance of the doctor and the silliness of his patients were each of them ridiculous enough to have set a person of more gravity than myself laughing; but then to consider the tragical issue to which these things tended, and the fatal effect so many murthering medicines might have on several of his Majesty's good subjects, would have made the merriest buffoon alive serious. I have not often observed a more hale, robust crowd of people than that which encircled this doughty doctor, methinks one might have read health in their very faces, and there was not a countenance among them which did not give the lie to the doctor's suggestions. Could but one see a little into futurity, and observe the condition they will be in, a few months hence, what an alteration would one find! How many of those brawny youths are already puking in chimney corners? And how many rosy complexioned girls are by this time reduced to the paleness of a cockney?

"I propose in a little time to make a second journey to this place, in order to see how the doctor's physic has operated. By searching the parish register, and comparing the number of funerals made weekly before the doctor's visit, with those which have followed, it will be easy to form an estimate of the havoc which this itinerant man-slayer made in the space of two hours. I shall then proceeed to compute the number of quacks in the three kingdoms, from which it will be no hard matter to determine the number of people carried off per annum by the whole fraternity. Lastly, I shall calculate the loss which the government sustains by the death of every subject; from all of which, the immense damages accruing to his Majesty will evidently appear, and the public will be fully convinced of the truth of what I had heretofore suggested, viz: that the quacks contribute more toward keeping us poor than all our national debts; and that to suppress the former, would be an infallible means of redeeming the latter. The whole scheme shall be drawn up in due form and presented to the Parliament in the ensuing session, and that august assembly, I don't doubt, will pay all regard thereto, which the importance of the subject and the weight of my argument shall require.

"Methinks the course of justice, which has hitherto obtained among us, is chargeable with great absurdities. Petty villains are hanged or transported, while great ones are suffered to pass immune. A man cannot take a purse upon a highway, or cut a single throat, but he must presently be called to answer for it at the Old Bailey, and perhaps to suffer for it at Tyburn; and yet, here are wretches suffered to commit murthers by wholesale, and to plunder not only private persons and pockets, but even the King and the Exchequer, without having any questions asked! Pray, Mr. Mist, what were gibbets, gallows, and whipping-posts made for?

"But to return to Dr. Thornhill. I have had the curiosity to examine several of his medicines in a reverberatory, reducing compounds into their simples by a chemical analysis, and have constantly found a considerable proportion of some poisonous plant or mineral in every one of them. Arsenic, mercury, and hemlock, are sine quibus non; and he could no more make up a medicament without some of these than remove a mountain. Accordingly as they are variously mixed and disposed among other drugs, he gives them various names, calling them pills, electuaries, etc. His pills I would describe as a succedaneum to a halter; so that such persons as are weary of this troublesome world, and would willingly quit it for a better, but are too squeamish to take up with that queer old-fashioned recipe called hanging, may have their business done as securely, and more decently by some of these excellent pills. His bolus, too, is very good in its kind; I have made experiments with it on several animals, and find that it poisons to a miracle. A moderate dose of it has perfectly silenced a bawling dog that used to disturb my morning slumbers; and a like quantity of it had quieted several other snarling curs in my neighborhood. And then, if you be troubled with rats, Mr. Mist, there's the doctor's electuary, an infallible remedy, so I myself have

experienced. I have effectually cleared my own house of those troublesome animals, by disposing little parcels of it in the places they frequent; and do recommend it to you and your readers, as the most powerful ratsbane in the world. It will be needless to enumerate all the virtues of the doctor's several medicines; but I dare affirm that what the ancients fabulously reported of Pandora's box is strictly true of the doctor's packet, and, that it contains in it the seeds and principles of all diseases.

"I must ask your pardon, Mr. Mist, for being so grave on so ludicrous a subject, and, spending so many words on an empty quack."

It is well to commend the study of the history of medicine to our State Medical Society, and especially the great masters responsible for its development, and remarkable unselfishness, honesty and untiring efforts. This study may be used for future guidance and help us to eliminate, as best we can, all political influences from the workings of our society, always basing our progress upon merit and scientific worth. It is only in this course that we can hope to conquer the foes that impose on the ignorant and gullible public.

Through education alone we may expect to receive our just reward. To meet the quack with schemes and manipulations we place ourselves upon the plane he occupies. Therefore, our duty to our profession and humanity is to reprove the impostors by our ability and application and by our well ordered life. We must eliminate petty jealousies from among our own members, defend them rather than criticise them when we know they are doing their best though there may be a difference of opinion among us as to treatment, etc. A member of our profession that deals unfairly and is not honest with his patients is worse than the most notorious quack.

We cannot prove our appreciation for the makers of the history of medicine in a better way than by an honest co-operation in our efforts and by progression through our acquired knowledge, ability and integrity, that being the standard for our members. In so doing we shall travel in the footsteps of our noted masters and commemorate their noble spirits as they guide us on to greater and nobler achievements.

CHIROPRACTIC AND OSTEOPATHY.

The former received recognition and both separate boards which was opposed on account of inadequate educational requirements and multiplicity of boards because their requirements put a premium on illiteracy and a discount on medical education.

The chiropractic's success was due to thorough organization, public press propaganda, letters, telegrams and personal efforts, claiming their opposition was mercenary persecution, instead of prosecution for higher medical education, and it was surprising the effect it had on a majority of the Legislature, as shown by results.—*Extract from Report of Committee on Public Policy and Legislation. Iowa State Medical Society.*

"The way of modern medical education is long and irksome; the expense very great. The physician thus trained and equipped is justified in guarding jealously the rights and privileges of his attainment. Having spent toilsome and tedious years in scientific fundamentals and clinical preparation, is it to be wondered that he looks askance at those who by short-cuts, a brief period of superficial preparation, parade themselves as competent to understand the human body, well or sick. For example, they may assume to cure all the complex and widely distributed alterations of its mechanism by the so-called adjustment of a spinal vertebra. A master plumber before recognition as such, must spend two or three years as an apprentice. A locomotive fireman devotes years to observing the work of the engineer before he is promoted to the rank of the latter. How much more therefore should one prepare himself if he would assume to understand the most complex machine known to mankind—the human body. To assume responsibility for its care and direction without adequate preparation is the act of a pretender, whose motives are dominated by ignorance or prompted by avarice."—*Frank. B. Wynn, Journal Indiana State Medical Association.*

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All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

NATIONAL CANCER WEEK.

With the announcement by the American Society for the Control of Cancer that National Cancer Week will be observed October 30-November 5, comes the lamentable statement that, so far as Arkansas is concerned, our report of progress gives an increase of cases totalling 18 per cent in 1820 over 1919. Nor thus far has any advantage been gained over the terrible mortality attending cancer throughout the United States since 1915.

In other words the mortality rate from cancer has remained stationary for the last six years; and this condition obtains in spite of the recent treatment by radium, which treatment will obliterate the disease in the early stages.

The great trouble is, as has heretofore been pointed out, that the early stages are not recognized as being cancer. In countless cases the early swelling, tumor masses, scurvy and scaly eruptions and discolorations of the skin are given no attention until the disease has become so deep seated as to nullify treatment. To reach the people generally the public press must be enlisted in the cause. The importance of reaching the public lies in the fact that in thousands of cases of cancer in earliest stages, the patient does not trouble to consult his physician. He frequently applies some local home remedy and often continues to do so until too late to hope for a cure.

When it is considered that 85,000 victims of cancer die every year in the United States, the need for desperate effort to curtail this annual toll of human life becomes very apparent. And the further fact that a large majority of these victims die needlessly—that if taken early they could have been cured—makes the need of concerted action all the more imperative.

The organization is now nation-wide. Each State has its State Chairman and local subchairmen and committees. The campaign in Arkansas started last winter and has been kept up. A large amount of literature has been sent out to physicians and the laity. The Cancer Week campaign is to concentrate effort by all manner of publicity. The lay press will assist if rightly approached and provided with the right kind of literature, properly prepared for publication. The idea is, so far as possible, to reach the people of every State even to the remotest mountain fastnesses and impress them with the need of co-operation with the medical profession in combating one of the greatest menaces to the public health. Civic organizations of every kind will be urged to assist in the great concerted effort to control this frightful disease.

THE NEED OF AN ATTORNEY.

The House of Delegates of the Arkansas Medical Society did a wise thing in adopting a motion of Dr. R. H. T. Mann of Texarkana authorizing the Council to employ an attorney. Primarily to endeavor to secure the passage of needed legislation and incidentally to give legal advice on whatever other matters may come up from time to time.

The efforts of members and legislative committees in securing the passage of the various bills introduced from time to time in successive Legislatures, have amounted to little and

the chances are that they will continue to fail of their purpose.

Dr. Mann reeited his personal experiences in trying to get two bills through, against the opposition of the member from his own county. Dr. Thad Cothern said his eyes had been opened by his experiences in the last Legislature.

Our Legislative Committee, as well as individual members, have signally failed and not for want of zealous effort. As Dr. Mann pointed out a large number of the members of the Legislature are themselves lawyers, and a lawyer can have influence that no layman or physician can exert. The physician is seldom an astute politician. He does not "know the ropes." He fails to make an impression and his purposes are apt to be considered of a self-seeking kind to be frowned upon.

As the Journal has frequently held, the physician can do more real work in his own county with his own member of the House or Senate than he can when the Legislature is in session. In this way, if the members of the Arkansas Medical Society in every county will do tactful missionary work, not when the Legislatnre is in session, but at home, practically every member of both houses can be approached, made to understand the measure proposed, and then the legal representative of the society will find the gronnd prepared for him and all such measures endorsed by the society will have an excellent chance of enactment into laws.

Editorial Clippings.

FLORIDA'S NEW PRACTICE ACT.

After several years of effort a new medical practice law has finally been secured in Florida, clearing away the obsolete multiple board arrangement which for many years has caused much confnsion in medical licensure in that State. The new law establishes a composite board which has full anthority to refuse or revoke licenses, to refuse recognition to low-grade medical colleges and to protect the public against incompetent physicians. The personnel of those appointed on this board promises assurance that the provisions of the new law will be enforced. The people of Florida are to be congratulated on the passage of this law, and it is hoped that they will appreciate its importance and support its vigorous enforcement. The only flaw in this act is that osteopaths and chiropractors are exempted from the requirements of the medical practice act since, for the time being, their practice is regulated by separate boards. In time, however, when public opinion has been awakened to the injustice and unwisdom of providing an inferior standard of qualifications for any group of healers, these special boards may be abolished, as they were this year in New Jersey. Public opinion will not long uphold an evident injustice, once attention has been clearly called to it.—*Jour. A. M. A.*, July 30, 1921.

Abstracts.

INCIDENCE OF CANCER IN SECOND BREAST.

Eleven hundred unselected cases of cancer of breast were studied by Alson R. Kilgore, San Francisco (*Jour. A. M. A.*, Aug. 6, 1921), thirty-seven instances of cancer in both breasts were recorded (3.36 per eent.). In thirteen of these the patient presented herself with both breasts already involved, the histories in the majority suggesting that cancer arose in one breast and metastasized to the other, rather than that tumors arose simultaneously and independently in each breast. Of the remaining twenty-four cases, in eleven the postoperative history suggested that the second breast cancer was metastatic, on account of its appearance within a short interval of time after removal of the first breast, or its development eoincidentally with other metastases in the axilla on the side of the first cancer, or in other organs. The interval between operation and the appearance of the cancer in the second breast in these eleven cases varied from two to thirty months, averaging twelve and one-half months. In thirteen cases, the cancer in the second breast presented a clinical history suggesting a new and independent neoplasm, on account of a long interval of time after removal of the first breast with freedom from other metastases, or (in two instances) a comparatively short interval, but freedom from other metastases, and cure by operation on the second breast. Twelve of this group of thirteen cancers which be-

haved as if they were primary tumors in the second breast, occurred in patients living five or more years after the first operation. The expectancy of cancer of the second breast in women who live five years or more after the first breast cancer has been removed is shown to be from 7 to 10 per cent. The Census Bureau reports show that of all women between the ages of 25 and 29 one in fifty-eight will at some time in her life develop cancer of the breast, a percentage of 1.7 per cent. At no period of life does the ratio rise to more than one in fifty-two, or about 2 per cent. When a patient is free from metastasis for five or more years, develops cancer of the second breast, is operated on and in the course of from one to three years develops metastases or recurrences on the side of the second breast and dies after about the usual length of life for primary cancer, Kilgore says the reasonable presumption is that this patient's life might have been saved by removing the second breast before cancer developed in it. Such a study of the records suggests that if both breasts had been removed at the first operation, thirteen cancers and at least ten deaths might have been prevented. If the patients living after a three-year interval had had their second breasts removed, then the records still suggest that ten deaths from cancer in the second breast might have been prevented. After a five-year interval, this number has dropped to six possibly preventable deaths. As only 257 of the 659 patients traced were living at the end of three years, it would be necessary to perform but 257 breast exeisions at this interval to save ten lives; therefore, with absolute and ideal control of patients 250 breasts could be amputated within three years, instead of 650 at the time of the first operation and as many lives saved. One patient in five has no involvement of the axilla at the time of the first operation, and if these patients had their second breasts exeised, three out of four eases of late cancer in the second breast would be prevented.

DETERMINATION OF BASAL METABOLISM.

The chief role of indireet ealorimetry in the clinic of today, James H. Means, Boston, (*Journal A. M. A.*, July 30, 1921) says, is the quantitative estimation of thyroid function and the accurate representation of the effects of treatment, either those measures in hyperthyroid states which are designed to reduce thyroid activity, or thyroid therapy in conditions of hypothyroidism. Outside of thyroid disease, the metabolism determination as a diagnostie procedure or funetional test does not play an important role. It is obvious that when hypothyroidism or hyperthyroidism is suspected, metabolic studies will be of great assistance in the differentiation of effort syndrome and mild hyperthyroidism, for example, and of toxic from nontoxie goiters, or in the borderline hypothyroid conditions. One other direct elinical applieation is in the matter of obesity. Studies have shown that in simple obesity the basal metabolism is normal. Such obesity is due to a disproportion between food intake and bodily aetivity, and not to any fundamental change in the rate of combustion in the body. In such persons the giving of thyroid raises the metabolism to an abnormal level—produees hyperthyroidism, in other words. The treatment, then, of simple obesity with thyroid is pernicious. It relieves one evil by creating another. Means says he has been impressed of late with the very common use of thyroid by the laity for purposes of weight reduetion. He thinks the sale of this drug, exeept on prescription, should be prohibited by law. Metabolism studies have eonvineed him that thyroid should never be given, exeept to persons who exhibit subnormal metabolism. By means of the metabolism determination, the case of simple obesity can be differentiated from obesity due to endocrine disease. This applies not only to hypothyroid obesity but to pituitary as well. In hypopituitarism there is a reduction in metabolism level just as in hypothyroidism, though perhaps of lesser degree, so that ealorimetry may help us in reeogniz-ing obesity of pituitary origin also. Of diseases other than of the thyroid and pitnitary in which there are alterations in basal metabolism, the most striking are the leukemias and severe anemias, particularly pernicious anemia.

Papaverine Sulphate Tablets-Roche—Each tablet contains 0.04 Gm. papaverine sulphate-Roche (see New and Nonofficial Remedies, 1921, p. 211). Hoffmann LaRoche Chemieal Works, New York (Jour. A. M. A., July 23, 1921, page 287).

A NATIONAL CANCER WEEK

October 30-November 5
1921

The American Society for the Control of Cancer is planning a National Cancer Week. The aim of the campaign is entirely educational.

Some time ago the Chairman of the State Cancer Control Committee wrote the Secretary of each of the county medical societies requesting that a local Cancer Control Committee be appointed. Some have not replied. Please attend to this matter at once and mail the names of the medical members to the Chairman of the Arkansas State Cancer Control Committee when detailed plans for the National Cancer Week will be mailed the Chairman of the local committee.

As it is desired to reach all parts of the country and as many of the population with the hopeful message of cancer control as possible, it will of course be necessary to effect a complete organization before anything else can be done. Your help is imperative. In the United States the cancer death rate has remained practically stationary since 1915. In Arkansas it increased 18 per cent last year. Let's get in the national swim and start the curve downward.

Insidious in its onset;
Painless in its incipiency;
Local in its early stages when
Curable if properly treated.

Personals and News Items.

Dr. T. H. Nims, of Oshkosh, Wis., has located at Hot Springs.

Dr. F. J. Scully, Hot Springs, has moved to Milwaukee, Wis.

Dr. M. B. Owens has moved from Sulphur Springs to Remmel.

Dr. Carle E. Bentley, who spent his vacation in Chicago, has returned to Little Rock.

Dr. and Mrs. Frank B. Young, of Gering, Neb., are visiting friends in Little Rock and Springdale.

Dr. Frank A. Norwood of Lockesburg, and Miss Dorothy Corbett of Ashdown, were married at Texarkana, July 24, 1921.

Dr. J. W. Powell, of Detroit, Michigan, has returned to Arkansas and will locate at Russellville.

Dr. Charles Wallis of Arkadelphia, is in Philadelphia taking a post-graduate course in pediatrics.

The Journal is your FORUM—we invite you to utilize it for the expression of your views on medical subjects.

"Germs," says the U. S. Public Health Service, "are usually a hand to mouth affair. Better wash up."

Holes in the street are warning against more holes. So are holes in the graveyard. Repairs in time will delay both.

"Some people say that sanitation doesn't pay. Well, it doesn't pay doctors and gravediggers," says the U. S. Public Health Service. "Be sanitary, seek health before you need it."

Dr. Marcus Henry Crocker, Oakland, Cal., formerly U. of A. medical student, Little Rock, has accepted service with the United States Public Health Service in the Canal zone.

"Venereal diseases are conditions, not crimes," says the U. S. Public Health Service. "Many people have been infected innocently or in very early youth. The incidence of the disease in boys of seventeen is very high."

Professor Raymond Pearl, of the U. S. Public Health Service has discovered that both the suddenness and the destructiveness of the first "flu" epidemic coincides significantly with the normal death rate from heart diseases in many American cities. It does not so coincide with the death rate of any other important disorder. The inference is obvious.

Dr. Alfred S. Burdick has been elected to fill the vacancy as President of The Abbott Laboratories, caused by the death of Dr. W. C. Abbott.

He is a graduate of the Alfred University, Alfred, N. Y., and Rush Medical College, Chicago. He has been closely associated with The Abbott Laboratories for over seventeen years, and for the past six years has been Vice President and Assistant General Manager.

And yet we hear such expressions: "What's the use? I never attend; I never write a paper when I do go; nor do I take part in the discussions; the Society is run by a ring." Just as we have these stereotyped questions, so we give the same answer: "Join your State Society; help support it; do not let other men no more prosperous than yourself furnish the wherewithal to keep you in the practice of medicine. Do not call your society dead just because you do not go, or belong. If it is dead enliven it by your presence.

The opening of wards in general hospitals for tuberculous patients, as recommended by the American Medical Association at its recent annual meeting in Boston, will, it is believed by the U. S. Public Health Service be of enormous benefit not only to most of the two million known victims of the disease in the United States, but also to thousands of others in whom the disease is incipient and easily suppressible, if promptly treated. Tuberculosis in this stage is difficult and often impossible of positive diagnosis, even by an expert; and many persons, even when told by their family doctor that their case is "suspicious" and that they should take precautionary treatment, fear the stigma of an

avowed tuberculosis hospital and put off action until recovery has become long and difficult. In a general hospital the diagnosis will not be made public and the family will not be embarrassed, but at the same time all necessary precautions can be taken to avoid danger of infection to others.

The resolution was prepared and recommended by the National Tuberculosis Association in 1916; its approval now by the American Medical Association shows a very marked change in medical sentiment.

SOUTHERN MEDICAL ASSOCIATION MEETING.

The indications are that there will be a large attendance at the meeting of the Southern Medical Association at Hot Springs, November 14-17. The Medical Association of Georgia has completed arrangements for a special train of all steel equipment of sleeping and drawing cars, compartment and dining cars to leave Atlanta at 5:30 p. m., Saturday, November 12, arriving at Birmingham at 10:40 p. m., reaching Memphis early Sunday morning with a tentative plan of a stop-over of several hours and reaching Hot Springs Sunday afternoon, November 13. That looks as though our Georgia brethren feel sure of a big attendance does it not? The members from Georgia, Virginia, Florida and the Carolinas will start from Atlanta on the special; those of Alabama will join the party at Birmingham; those of Mississippi, Tennessee and Eastern Arkansas will get aboard at Memphis. A special rate of a single trip fare plus one-half has been granted for the round trip, on identification certificates issued from the Southern Medical Association office at Birmingham, Alabama.

An elaborate social entertainment plan has been arranged and all members who attend are urged to bring their wives with them.

With an excellent program and the many and varied attractions offered by Hot Springs the attendance is expected to break all records of previous meetings.

LIST OF COMMITTEES OF THE ARKANSAS MEDICAL SOCIETY.

Dr. Chas. H. Cargile of Bentonville, President of the Arkansas Medical Society, has announced the following committees for the ensuing year:

Scientific Program—St. Cloud Cooper, Fort Smith, Chairman; M. D. Ogden, Little Rock, and Wm. R. Bathurst, Little Rock.

Medical Legislation—Robert Caldwell, Little Rock, Chairman; G. S. Brown, Conway; J. A. Bogart, Forrest City; J. T. Clegg, Siloam Springs; O. M. Bourland, Van Buren; A. C. Jordan, Pine Bluff.

Necrology—F. Vinsonhaler, Little Rock, Chairman; Oscar E. Jones, Newport; C. A. Rice, Rogers; A. S. Buchanan, Prescott; M. Fink, Helena; R. H. T. Mann, Texarkana.

Health and Public Instruction—L. Kirby, Harrison, Chairman; Thomas Douglass, Ozark; H. A. Ross, Arkadelphia; Chas. H. Cargile, Bentonville (ex officio); Wm. R. Bathurst, Little Rock (ex officio).

Cancer Research—E. E. Barlow, Dermott, Chairman; A. E. Chace, Texarkana; W. V. Laws, Hot Springs; Dewell Gann, Jr., Little Rock; W. H. Deaderick, Hot Springs.

Infant Welfare—G. A. Warren, Black Rock, Chairman; Charles Wallis, Arkadelphia; A. C. Kirby, Little Rock; W. T. Wootton, Hot Springs; H. H. Niehuss, El Dorado.

Workingmen's Compensation and Social Insurance—J. M. Lemons, Pine Bluff, Chairman; Thad Cothern, Jonesboro; Henry Thibault, Scott; R. Y. Phillips, Malvern; W. R. Brooksher, Fort Smith.

Hospitals—C. S. Pettus, Little Rock, Chairman; John Stewart, Booneville; R. C. Dorr, Batesville; J. I. Scarborough, Little Rock; E. F. Ellis, Fayetteville; J. J. Smith, Paris.

Scientific Exhibit—D. A. Rhinehart, Little Rock, Chairman; J. D. Southard, Fort Smith; Chas. E. Oates, Little Rock; W. V. Laws, Hot Springs.

Obituary.

DR. A. G. THOMPSON—Arthur George Thompson, M.D., Pine Bluff, age 70, died August 18, while treating a patient in his office. He had been suffering for some time from high blood pressure, but seemed as well as usual on the afternoon of his death. He had been practicing in Jefferson County for about forty years. He leaves a wife and three children, Louise Thompson, Mrs. Frank Royston, Pine Bluff, and Mrs. Arnold of El Paso, Texas.

County Societies.

ARKANSAS CONTY.

(Reported by M. C. John, Sec.)

The Arkansas County Medical Society met in office of Drs. Fowler and Sheets in Humphrey, July 12, 1921.

In the absence of the president, Dr. Fowler was elected Chairman protem. Present: Fowler, Sheets, Moorhead, Neighbors and John.

Dr. Fowler, the essayist, had "Pellagra" for his subject. Any member would have been amply paid for a trip across the country to have heard Dr. Fowler.

The members were unanimous in their expressions of regret over the loss of the late Dr. Hill of Stuttgart and the serious illness of Dr. Morphew.

Drs. Rasco and Winkler were selected as essayists for the next meeting, which will be held in DeWitt, October 11.

Upon adjournment Drs. Fowler and Sheets very royally entertained us with a 6:00 o'clock dinner at which Mesdames Neighbors and John were also guests.

INDEPENDENCE COUNTY.

(Reported by F. A. Gray, Acting Secretary.)

The Independence County Medical Society met in Batesville, Monday night, August 8, 1921. Present: Drs. Case, Lawrence, Kennerly, Johnston, Craig, F. A. Gray and C. C. Gray, Jeffrey, L. T. Evans, King, Huskey, McAdams; Drs. Laman of Cave City, and McGill of Batesville, were visitors.

Dr. Laman presented a very interesting heart case which elicited general discussion. The case proved to have hookworm on further examination.

Dr. Johnston reported a case of "pyelitis" and Dr. Jeffrey read a paper on "malarial hematuria," with a report of a case.

The society will have a symposium on diseases of the kidney at our next meeting with the following program:

Dr. L. T. Evans, Anatomy and Physiology of the Kidney.

Dr. McAdams, Urinalysis and Anomalies of the Kidney.

Dr. Huskey, Acute Nephritis.

Dr. Roe, Chronic Nephritis.

Dr. Case, Diabetes.

Dr. Hinkle, Pyelitis.

The society would like for each physician to furnish some clinical material on this symposium.

Next meeting Monday night, October 10.

WOODRUFF COUNTY.

(Reported by L. E. Biles, Sec.)

The Woodruff County Medical Society met in Augusta, August 3, 1921. Meeting called to order by President R. L. Fraser. Present: Fraser, Maguire, Smith, Brewer, Dungan and Biles.

"Pellagra" was discussed, ten cases having been reported in the county to date, Dr. Smith reported a case that was preceded by facial paralysis one month before other symptoms of pellagra appeared.

Dr. Maguire reported several cases, one of which is so severe he is giving raw vegetables, eggs and milk from which he is getting good results. The only remedy he is using is ichthyol.

Dr. Brewer believed the cause of pellagra to be low grade of food. His treatment is some form of arsenic, preferably Donovan's solution, beginning with one-drop doses and increasing one drop each day to thirty drops three times a day. Forced feeding is recommended, to consist of fresh lean meat, at least one pound every day, with fresh milk, eggs and vegetables.

Dr. Dungan said: "Pellagra being caused by the consumption of a low grade of diet, it will soon be termed a disgrace for a landlord to have a case of pellagra on his farm."

If a better grade of food were furnished in the way of fresh milk, eggs, green or dried peas, (not canned) fresh meats and other wholesome foods, pellagra would be eliminated, he said.

Dr. Fraser for the skin lesions uses one per cent solution of Sulphuric acid to bathe parts; using no soap at any time. He reports good results in a very bad case in two weeks. Diet: Milk, while fresh and warm; fresh meats and whole-grain products.

It was moved and seconded that a called meeting of Woodruff County Medical Society be held in the near future, and that we invite the landlords to meet with us for the purpose of discussing food values with reference to pellagra.

FRANKLIN COUNTY.

(Reported by Thomas Douglass, Sec.)

The Franklin County Medical Society met in regular session July 12, 1921, with Dr. Gammill presiding.

Present: Post, King, Hudson, Vaught, Davis, Gibbons, Blackburn, Gammill, and Douglass.

A committee appointed at the previous meeting reported a scheme for handling delinquent accounts. Under the plan every member is requested to send to the Secretary a list of his delinquents and the Secretary will then mail to each one a letter urging the importance of settling the bill and suggesting the possibility of failing to get service sometime when it is badly needed. The plan was received with some enthusiasm. Anyhow, we will try it out. The impression prevailed that doctors suffer too much from deadbeats.

Dr. W. J. King read an interesting paper on "Gas-Tuberculosis" in soldiers who have been gassed. This was on request of the Chemical Warfare Service which is investigating the supposed relation between gas and tuberculosis in soldiers.

Dr. Post reported a case of strychnine poisoning in a child three years old which had swallowed about twenty Lane's pills The pills were chocolate-coated and were softened by the warm weather which promoted their absorption. The child being alone in a room, found the bottle on a table and swallowed some of the pills, walked into another room and told his mother he had taken his medicine and wanted some water. A doctor was summoned at once, but before his arrival convulsions had set in and death occurred within forty minutes from the time the pills were swallowed. The label on the bottle showed poison content. As the pills could hardly have contained more than one-third of a grain forty minutes seems a short time for such absorption. Dr. Douglass reported having seen a similar case several years ago. A two-year-old baby had swallowed some Lapactic pills; convulsions and death occurred within an hour. Dr. Post had given a dog three grains of strychnine, which did not prove fatal. After a few convulsions the dog appeared all right.

Dr. Horner, of Alix, recently of Spadra, was elected a member.

Papers for the next meeting will be by Drs. Post, Gibbons and Hudson.

LAWRENCE COUNTY.

(Reported by H. R. McCarroll, Sec.)

The Lawrence County and First District Medical Society met in joint session at Hardy, Sharp County, Wednesday, August 3, 1921, with Dr. Wm. Johnson and Dr. Geo. G. Buford of Memphis, who owns a health resort hotel at the place. The societies met here under special invitation.

The meeting was held in the Baptist Church and was called to order by Dr. H. R. McCarroll, Secretary of the Lawrence County Society, at 3:00 o'clock.

Dr. Wm. Johnson of Jonesboro was then chosen president for the session, and delivered address of welcome.

Mr. S. P. Turner spoke on behalf of Hardy, and Dr. J. C. Swindle responded on the part of the visitors. The afternoon was devoted to a symposium on "Pellagra" with Dr. John L. Jelks of Memphis, essayist. It was a most excellent address condemning the Goldberger theory that poor diet is the leading cause of the disease as a specific agent, that the ameba hystolitica or flagellates, are always found in the intestinal canal. "It is a stigma of disgrace to the south to say that the eating of fat meat, corn bread and sorghum molasses is the main etiological factor in the production of such a disease." This point was forcefully emphasized. Not a single physician present expressed belief in the Goldberger theory. Drs. Warren, Wm. Brit Burns, Frank D. Smythe, Swindle, Hughes, Crisler, Buford, Johnson and McCarroll discussed the paper.

The physicians and ladies in attendance were then given a most delightful automobile ride, up and down the river and over the high hills surrounding the town, which afforded us some of the most beautiful sights that we have ever beheld. Many tourists and scout clubs from all over the country are now attending this popular and growing resort.

The next thing for our enjoyment was a most appetizing basket picnic supper prepared by the ladies. It was unique in many respects and was certainly enjoyed by us after having the relish of the mountain ride.

Dr. Frank D. Smythe read a paper upon "Hysterectomy," demonstrated by motion pictures which showed every step in the operation of the wound. It was an excellent paper, splendidly demonstrated, and much enjoyed. Discussed by Drs. Black, Jelks, Crisler, Burns and Warren.

Dr. Henry Hill, an orthopedic specialist of Memphis, read a paper on "Internal Derangements of the Knee Joint" which was very timely and instructive, being illustrated by lantern slides.

Dr. Wm. Burns, as president of the Tennessee Medical Society, then made an address giving some of his reminiscences as a young physician in Arkansas, and vividly pictured the great strides made in medicine and surgery in the last quarter of a century.

On motion of Dr Jelks, a rising vote of thanks was extended to Drs. Johnson and Buford, and the ladies who arranged the supper and every one who helped to entertain the guests in such a royal manner.

The physicians present were: W. T. Black, Geo. G. Buford, Wm. Brit Burns, Chapman, Crisler, Glover, Henry Hill, Howard, Powell, Jackson, Jelks, Johnson, Robinson, Sauls, Swindle, Smythe, Warren and McCarroll.

The ladies were the Mesdames Warren, Howell, Swindle, Sauls, Johnson, Hill Chapman; Misses Elsye Townsend, Howell, Merle Johnson, Thelma McCarroll and Ura McCarroll.

Book Reviews.

THE ALLEN (STARVATION) TREATMENT OF DIABETES, with a series of graduated diets. By Lewis Webb Hill, M.D., and Rena S. Eckman, M.D., with an introduction by Richard C. Cabot, M.D. Fourth edition. Published by W. M. Leonard, 711 Boylston St., Boston, Mass. Price $1.75.

The book presents a successful treatment for diabetes. It gives full description of the treatment. Typical case histories and complete daily diet list.

It has been said that Dr. Allen did most to solve the diabetes problem. This book is the answer.

PRACTICAL TUBERCULOSIS. A book for the general practitioner and those interested in tuberculosis. By Herbert F. Gammons, M.D. Introduction by J. B. McKnight, M.D. Published by C. V. Mosby Company, St. Louis, 1921. Price of the book is $2.00.

The author of this little book describes some very valuable considerations in the study and in detail life of the tuberculosis patient. We quite agree with his remark, "Getting over tuberculosis is a man's game."

This book offers valuable help to the general physician when considering his tuberculosis patient.

DISEASES OF THE INTESTINES AND LOWER ALIMENTARY TRACT.—By Anthony Bassler, M. D., Professor of Gastro-Enterology, Fordham University Medical College, New York. Illustrated with 154 text engravings and sixty-two full page halftone plates (with over seventy figures), some in colors. Published by F. A. Davis Company, Philadelphia, 1920. Price, $7.00.

It is the author's object in presenting this work to serve as a guide and keep the context as clinical and close to the actual cases as possible. Figure 13 describes the author's examination blank. Printed in the form of a 3-ply folder. These history sheets, now used by the author in numberless cases, have proven to be most satisfactory.

PSYCHOPATHOLOGY. By Edward J. Kempf, M.D., Clinical Psychiatrist to St. Elizabeth's Hospital (Formerly Government Hospital for the Insane), Washington, D. C.; Author of the "The Autonomic Functions and the Personality." Eighty-seven illustrations. Published by the C. V. Mosby Company, St. Louis, Mo. Price $9.50.

The author presents this volume especially for the professional student of human behavior who must have an unprejudiced insight into human nature in order to deal justly and intelligently with problems of abnormal actions.

DERMATOLOGY. The essentials of Cutaneous Medicine. By Walter James Highman, M.D., New York. Published by the MacMillan Company, New York, 1921.

This book presents the author's conception of the minimum requisite for an adequate outline of the subject. It is a pleasure for the review editor to congratulate the author for this valuable gift to the profession, which gives so completely the essentials of dermatology, without sacrificing important details. The large collections of photographs illustrate the conditions described in the text.

TUBERCULOSIS OF CHILDREN—Its Diagnosis and Treatment. By Professor Dr. Hans Much, Director of the Department for the Science of Immunity and for Research in Tuberculosis, at the University of Hamburg, Germany. Translated by Dr. Max Rothschild, Medical Director of the California Sanatorium for the Treatment of Tuberculosis, San Francisco and Belmont, California. Published by the MacMillan Company, New York, 1921.

This book is edited by one of the world's leading tubercular therapists. It presents a

general treatise of his startling theories of immunity and a section on the principles of the treatment.

Physiology and Biochemistry in Modern Medicine. By. J. J. R. MacLeod, M. B., Professor of Physiology in the University of Toronto, Canada. Third Edition. With 243 illustrations, including 9 plates in colors. Published by C. V. Mosby Company, St. Louis, 1920.

This book deals with the present-day knowledge of human physiology in so far as this can be used in a general way to advance the understanding of disease. It is full of useful information for those of a maturer clinical experience who may desire to see the physiological interpretation of diseased conditions.

Many additions are found in this new edition, particularly in that which deals with the endocrine organs.

The Duodental Tube and its Possibilities.—By Max Einhorn, M. D., Professor of Medicine at the New York Post Graduate Medical School; Visiting Physician to the Lenox Hill Hospital, New York City. Octavo of 122 pages, with fifty-one illustrations. Published by W. B. Saunders Company, Philadelphia, 1920. Price: Cloth, $2.50.

This book gives the author's lectures on the duodenal tube, giving a full resume of what has been thus far accomplished with it. Contents are as follows: Chapter I, "The Duodenal Tube and its Congeners"; Chapter II, "The Duodenal Contents"; Chapter III, "The Diagnostic Import of the Duodenal Tube"; Chapter IV, "The Duodenal Tube as a Therapeutic Means"; Chapter V, "Other Instruments for the Pylorus, Duodenum and Small Intestine"; Chapter VI, "The Practical Use of these New Instruments."

Traumatic Surgery. By John C. Moorhead, M.D., F.A.C.S., Late Lt. Col. Medical Corps, American Expeditionary Forces; Professor of Surgery and Director Department of Traumatic Surgery N. Y. Post Graduate Medical School and Hospital. Second Edition. Entirely reset. Octavo of 864 pages, with 619 illustrations. Published by W. B. Saunders Company, Philadelphia, 1921. Cloth, $9.00 net.

This book presents the necessary information to diagnosis and treats of all the usual and most of the unusual effects of accident and injury. Many changes and additions are to be found in this edition. New drawings are included and another chapter added dealing with stardardized first aid methods as related to industrial surgery.

The importance an need of wider knowledge in accident surgery is now so well recognized that many physicians will appreciate this instructive volume.

The Practical Medicine Series. Comprising eight volumes on the year's progress in medicine and surgery. Under the general editorial charge of Chas. L. Mix, A.M., M.D., Professor of Physical Diagnosis in the Northwestern University Medical School. Published by The Year Book Publishers, Chicago.

Volume II. General Surgery. Edited by Albert J. Oschner, M.D., Chicago. Series 1920. Price $2.50.

Volume III. Eye, Ear, Nose and Throat. Edited by Casey A. Wood, M.D., Albert H. Andrews, M.D., and George E. Shambaugh, M.D. Series 1921. Price, $1.75.

Volume IV. Pediatrics. Edited by Isaac A. Abt, M.D.,, Chicago. With the collaboration of A. Levinson, M.D., also in this volume there is a section of nearly a hundred pages devoted to

Orthopedic Surgery. Edited by Edwin W. Ryerson, M.D., with the collaboration of Robert O. Ritter, M.D. Price $1.75.

Price of the Series of Eight Volumes, $12.00.

This series is published primarily for the general practitioner at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

New and Nonofficial Remedies, 1921, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on Jan. 1, 1921. Cloth. Price, postpaid, $1.50. Pp. 418+XXXII. Chicago: American Medical Association, 1921.

New and Nonofficial Remedies contains descriptions of proprietary medicines which are offered to members of the American medical profession. These descriptions are critical and trustworthy. They are based in part on investigations made by, or under the direction of, the Council on Pharmacy and Chemistry and in part on information supported by evidence submitted by the manufacturer or his agent. Statements made by those interested in the manufacture or marketing of preparations must be supported by substantial evidence or conform to generally accepted facts before such statements are accredited in the acceptance of the article for N. N. R.

This volume contains descriptions only of those proprietary and nonofficial products which are in accord with the principles underlying the rules for the acceptance of products formulated by the Council. These principles provide that the quantitative formula of the article must be declared, the therapeutic claims made in advertising (or in marketing) the article must be true and the preparation must have, or give promise of having,

therapeutic value. Physicians may be guided by the information contained in this book in determining whether or not these proprietary preparations are indicated in the treatment of their patients. The interests of their patients as well as of the physicians themselves will be safeguarded by following the suggestion made in The Journal of the American Medical Association (Helping the Council of the American Medical Association, Nov. 6, 1920, page 1275) and by giving no consideration to any proprietary medicinal agent which has not been accepted and announced in New and Nonofficial Remedies.

A feature of the book which is of especially practical value is the grouping of preparations in classes. Each of these is introduced by a general discussion of the group. Thus the iodin preparations, the arsenic preparations, the animal organ preparations, the biologic products, etc., each are preceded by a general, thoroughly up-to-date discussion of the particular group. These general articles compare the value of the products included in the group with similar pharmacopeial and other established drugs which it is proposed that these proprietary preparations shall supplant.

Physics of Radioactivity.—The Text of a correspondence course prepared especially for the medical profession. By N. Ernest Dorsey, Ph. D., (J. H. U.), Consulting Physicist. Lately chief of the Radium Section of the National Bureau of Standards. 1519 Connecticut Avenue, Washington, D. C. March, 1921.

The following chapters were written expressly for use as a text for a correspondence course in the physics of radioactivity. A course of instruction that many physicians have long been waiting for. The early chapters are concerned with the discovery of radioactivity, of radium, and of the principles underlying radioactive phenomena. In chapter VII the equations, expressing the decay of the radio-element and the accumulation of the offspring of a long-lived parent, are derived in a simple manner from a consideration of the curve that represents experimental observations. In the following chapters equilibrium relations are considered and equations applicable to various cases of accumulation and decay are given.

The following three chapters (IX, X and XI) are devoted to a general consideration of matter and radiation, and of their interaction. In these chapters are laid the physical foundations upon which radiobiology and radiotherapy rest. In chapter XII the nature of the radiations from radioactive material is considered; and the principles developed in the preceding chapters are applied to these radiations. In the following chapter the rate of emission of energy by radium is considered and is compared with that by several familiar sources. The efficiency of radioactive radiations is discussed. Illustrations of the manner in which the various members of a family of elements are discovered and their relations established are given in chapter XIV. The following three chapters contain specific information concerning the various members of the three families of radio-elements. In chapter XVIII the practical significance of certain properties of radio-elements is considered.

Chapter XIX is devoted to the consideration of practical methods of removing and purifying the radium emanation. The principles underlying certain types of measurements employed in radioactivity are considered in chapter XX and the impracticability of certain other types is discussed. The next chapter is devoted to units and standards.

Chapter XXII contains numerous practical suggestions regarding the purchase of radium. In chapter XXIII the occupational dangers to which radium workers are exposed are considered. Chapter XXIV deals with the physical principles involved in the specifications of a dose; and chapter XXV includes additional miscellaneous practical applications of the principles that have been developed in the preceding chapters.

Illustrations are used wherever their use will facilitate the exposition. A number of numerical tables for facilitating computation, as well as tables of constants pertaining to radioactive materials are given at the end of the volume.

Fifteenth Annual Meeting

of the

Southern Medical Association

Will be held in

HOT SPRINGS, ARKANSAS

November 14-17, 1921

The Secretary of the County Society will please notify the State Secretary immediately of any error or change in these officers.

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Original Articles.

"GLIOMA OF THE RETINA."*

Report of a Case.

H. Moulton, M.D., Fort Smith.

Glioma is the only neoplasm occurring in the retina. It occurs only in children, usually under five years of age. It is one of the most malignant of all new growths. It is usually not discovered until it has advanced far enough to produce a whitish reflex behind the pupil noticed by the parents. It is mostly unilateral, occasionally bilateral.

Unless the eye is enucleated before the growth extends into the optic nerve or through the coats of the eye it is generally fatal to life.

Post operative use of radium is likely to improve the prognosis. Every child's eye which deviates or looks peculiar should be examined for Glioma.

On November 13, 1920, M. P., a little girl, aged six years, came for examination. Her mother stated that she had never suffered any severe illness. Family history negative.

It was observed that the child had an ataxic gait and that the tendon reflexes were absent. The mother had noticed a deviation outward of the child's left eye about two months before bringing her to me. Two days before bringing her she had discovered that the child could not see well with the eye.

EXAMINATION.

Right eye was normal, superficial and deep. Vision 20/20. Left eye deviated out 15 degrees. It was free from superficial signs of disease. The pupil was 3 m. m. in size and reacted to light. In the nasal and inferior portion of the fundus could be seen a whitish, non-vascular, non-pigmented tumor extending from just behind the iris nearly to the papilla. The papilla was fully visible. The retina was detached at places in the vicinity of the tumor, a few floating tags attached to the tumor extended out into the vitreous. The fundus above and temporally appeared quite normal. It was estimated that the tumor occupied about one-fourth or one-third of the vitreous chamber. Vision 2/200. In the absence of any history of illness or injury likely to produce a suppurative choroditis, or pseudo-glioma, a clinical diagnosis of glioma of the retina was made.

The case was subsequently seen by Drs. Thompson and Schutz, and perhaps others of Kansas City, who agreed in the diagnosis. The parents informed me that some of the physicians suggested the possibility that the peculiar gait and loss of reflexes and irritability of temper indicated that the glioma had already extended to the brain and that enucleation might fail to save the life of the child. But it seemed to me that the symptoms present could not justify a positive diagnosis of brain tumor. As the case had come at an unusually early period, with the tumor occupying only one-quarter instead of all the vitreous space and apparently not yet extending to the papilla, I felt that enucleation should be done. It would give the child a chance at least. Very few cases have been reported in children over five years of age. This fact was taken into consideration; but it did not weigh heavily against the provisional diagnosis.

The enucleation was done including one-quarter inch of the optic nerve, on November 22, 1920. The eye was sent to Dr. Verhoeff of Boston, who kindly examined the eye and reported it to be a typical glioma of the retina, without extension beyond the coats of the eye. Recovery from the operation was prompt and an artificial eye is being worn.

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

On December 4, 1920, 25 mgrs. radium were applied for two hours to the socket, through the closed lids, by Dr. Goldstein.

January 15, 1921, 50 mgrs. radium were applied in the same way for four hours. Once between these dates radium was applied in dosage unknown to me, by Dr. Sutton of Kansas City. These applications were with a view of prophylaxis against recurrence.

Dr. A. L. Skoog, neurologist of Kansas City, saw this child late in December, and writes me that so far he connot find positive evidence of a neoplasm within the cranium; but wishes to keep the case under observation.

At the present writing the child's general condition is improving. Its irritability is less, it walks better and the knee reflexes have in part returned. It has received no treatment other than the radium.

This case is interesting because of the early stage of growth of the tumor at which it was first seen, the prognosis is thereby better. If recurrence does not take place it will be the only such case I have observed. All the others, eight in number, have finally died of recurrence or extension with or without operation; but all had advanced to either the second or third stage of growth. They had not had the advantage of radium.

Second, it is interesting because of the nervous disturbance. What this signifies time alone will tell. Is there a brain tumor or has there been an anterior poliomyelitis, or what?

Third, it is interesting from the standpoint of radium therapy. What is a proper prophylactic dose of radium? What can radium do as a curative agent in Glioma?

A number of cases have been reported treated in this way, many of them without benefit. Some with apparent success in checking the intraocular growth or removing recurrences, for periods of a few weeks or months, but none for periods of time long enough on which to base hopes of a permanent cure. The most hopeful case in this connection I know of is one described to me in a personal communication by Dr. Verhoeff, in which he did not use radium but the x-ray. This was a case of bilateral glioma. One eye already blind was enucleated. The other eye with vision and the socket of the enucleated eye were treated by x-ray. There has been no recurrence on the enucleated side. The tumor in the remaining eye became diminished in size and quite transparent, indicating its probable destruction. Useful vision is retained. This case has been observed now for almost three years, lacking a few days. It seems probable that it may eventually be considered a cure.

We may conclude that in unilateral glioma we should enucleate and apply radium or x-ray to the orbit.

In bilateral glioma we may enucleate the worst eye and apply radium or x-ray to the orbit and treat the tumor of the other eye with either radium or the x-ray.

DISCUSSION.

Dr. J. F. Rowland (Hot Springs): Dr. Moulton has read a very interesting paper. This condition occurs, as he states, only on the retinas of children. In 1906, in Wills' Hospital in Philadelphia, I had occasion to see a case of glioma of the retina, and saw it operated on. In the following year, in my private practice, I saw two cases, children 22 months old. The one operated on in Wills' Hospital in 1906 was aged four. In the case of the twins that I saw, one eye of one of the children was further advanced than the other. The tumor had reached the third stage, protruding from the orbit, and was a red, angry, inflamed mass. The second child had a white or yellowish reflex emanating from the pupil. I insisted on an operation for these two children. One, I believe would have been saved, as there was a small whitish mass within the confines of the retina at that time. Of course, I believed that there was no hope for the second child. The parents refused an operation, and both cases terminated in death within twelve months.

In 1908, I read a paper on Glioma of the Retina before the Tri-State Medical Association in Memphis, describing these cases. It was believed at that time that, without an operation, all cases of glioma of the retina terminated in death.

At that time, of course, radium was not known, and had not been tried.

Dr. W. A. Kriesel (Little Rock): I would like to ask the doctor one question. What, in his opinion, has been the result of radium or the x-ray treatment on the other eye, in the possibility of bilateral glioma, with reference to the eye-sight?

Dr. Robt. Caldwell (Little Rock): I want to emphasize one or two points—one in particular—and that is that every child that has an eye that deviates from the normal, to use Dr. Moulton's words, is entitled to a thorough examination of that eye. I want to say also that those examinations, as a general thing, in children cannot be made well without a general anesthetic.

Dr. Moulton (in response): I wish to thank the gentlemen who have so kindly discussed the paper. As to the effect of the radium on the sight of the eye when applied to the remaining eye in bilateral cases, I will say that in the cases so far reported where radium or the x-ray has been used on the remaining eye, vision is not apparently affected in any way. This one case of Dr. Verhoeff's is the only one that has been observed as long as three years. The child has useful vision. The other cases, occurring in

very young children, of course, it is hard to estimate just what their vision always is; but, apparently, the retina, the optic nerve and other structures of the eye are unaffected by radium or the x-ray.

In cases of older people, with malignant growths in the eye, on the lids, the conjunctiva and the cornea, such as epithelioma of the conjunctiva, and epithelioma of the limbus, there have been a good many treated with radium and the x-ray. I have had a number of cases myself of these malignant growths, on the adnexa of the eye and beyond the eyeball itself, which have been treated with radium and with the x-ray. Radium and the x-ray, with reference to the eye, act very much as they do elsewhere in the body. They seem to have a selective action on the pathologic tissue and allow normal tissues to go uninfluenced. The cornea and generally the conjunctiva and the lens, the limbus, and the deeper structures of the eye seem to be uninjured by the action of these rays. The only injury that can occur, or that does sometimes occur, to the eye from the action of these agencies is an inflammation of the skin of the lids, and sometimes a falling out of the eye lashes; but the essential structures of the eye-ball itself do not seem to be harmed by these things; that is, the essential structures, including the optic nerve and the retina.

THE INDUSTRIAL MEDICAL DEPARTMENT OF THE FUTURE.*

A. E. Chace, M.D., Texarkana.

The work to be done by an industrial medical department varies somewhat with the character of the industry and of the management. The wall charts herewith give a rather vague outline.

The first question one must ask is: What prineiples are to be laid down to accomplish this work? I believe that:

(1) Some means to adequately finance these services must be found.

(2) The work should be done in accordance with the best modern technic.

(3) The records should be complete, and so summarized as to be profitable.

(4) Such a laboratory should be made use of as a teaching institution to give *esprit du corps* and incentive to the workers and to further the legitimate aims of industrial medicine and surgery.

I. Finance.

To be ultimately successful, I believe that an industrial medical service should be co-operative; *i. e.*, the financial burden should be borne in some manner by both employees and employer. The employer should not be expected to bear more than his just share, and this is a question for careful judgment and adjustment in each industry. Local conditions, the relative income of employees, the character of service rendered, the other existing opportunities for medical and surgical care, the risk assumed by the worker, and the extent of profits in the industry which would justify such co-operation must all be weighed. One must also consider the undoubted fact that the greater the share borne by the employee, the greater appreciation he will have for the service.

It is now customary to obtain the employee's share by deductions from his salary. In some plants a flat deduction of one dollar or more a month is made; in others the more equitable plan is followed of a sliding scale of deductions, depending upon the amount of the employee's salary or wages. Of course, if the families of employees are to share in the benefits of this service, the deductions must be proportionately larger.

When the type and extent of the service is determined, the approximate cost can be foretold. The share that the employee can and is willing to afford is then deducted, and the remainder must, of course, be covered by deductions. Under any conditions, the deductions should be ample. Modern industrial medicine is expensive, if it is comprehensive in scope.

Should these deductions be voluntary or compulsory, if the employee is to remain in the service of the employer? If they are made compulsory, then the employees have an undoubted right to the management of the fund so created. If they are voluntary, no such right exists. My personal observation leads me to believe that the management of such a fund by employees is seldom well done, and if a progressive management is desired, the employer can more often be trusted to give it.

II. Modern Technic.

To medical men, this item is clear. Permit me to quickly review some essentials.

The group system is all imporatnt. In the hospital, whether maintained by the industry or otherwise, facilities for the thorough modern treatment of illness must be obtainable. A laboratory with full time pathologist, or at least a technician, capable of all or most of the work of present day clinical pathology; a good x-ray equipment capable of gastro-

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

intestinal examinations and someone well qualified to do the work; a specialist in diseases of the eye, of the ear, nose and throat; an internist and a surgeon are the minimum requirements. All of this work must be correlated.

Courtesy and the insistence upon painstaking work are other essentials. If these are maintained, the converse must also be required—the patients must be under suffieient discipline to insure proper treatment and order, a condition not always easy to bring about in such industrial establishments.

Proper nursing is today a great problem. I believe that a training school for nurses will best solve the problem, even in an industry where men are in the large majority, provided that a hospital of at least fifty beds is maintained.

Minor technical procedures are very important, and but few can be touched upon. In medication, I am a firm believer that prescriptions should be limited to the Pharmacopeia, National Formulary and New and Nonofficial Remedies. In industry, the use of shotgun prescriptions, of patent medicines and bizarre combinations is too frequent. We have heard so much about the modern care of wounds lately that nothing seems necessary on that score. Our fracture cases need more serious thought. Every means for the careful analysis of gastrointestinal disorders are too frequently ignored. And so one may go through a long list, because in industrial surgery at least treatment must ultimately be so flexibly standardized that the unessential is left out and the essential adapted to the patient.

III. Records.

Records are usually the nightmare of the surgeon. For the best results, clerical issistance must be had; yet Dr. Colcord of the Carnegie Steel Company has recently raised the objection that privacy is thus destroyed. It seems to me that this is a question to be decided by each surgeon for himself.

Pardon me if I draw your attention for a moment to the records in use on the St. Louis Southwestern Railway Lines. They are not perfect—no forms ever are. They do, however, represent records which have been found serviceable in such an industry as transportation. The summary cards are indexed in two ways, alphabetically and by disease. The complete medical record of an employee is always kept in one folder, filed according to the medical number assigned to the employee. Thus the surgeon in the receiving ward is furnished with the complete previous history of the case immediately upon admission, so far as it is known to this department. Eaeh month and again each year, these reeords are summarized in the form shown. The staff discuss the results and help to interpret the statistics. This is but another phase of group practice.

IV. The Teaching Institution.

One could hardly look through such a book as Dr. Harry Mock has written without acknowledging that industrial surgery is a specialty, and like every other specialty requires training for proficiency. Our medical departments are laboratories for this training. Young surgeons if properly guided will develop into efficient components of industry. Our nurses in training should know what industrial nursing connotes.

What a difference between the institution that grinds out treatment somehow, and the striving for better methods that must go along with the teaching department! In this way only can we expect to get and hold the better physicians and develop the training school for the intelligent yonng woman.

This science of industrial surgery is said to be still in its infancy. If this be true, how can it grow except by the teaching and research work of the industrial department of medicine and surgery? Colleges and institutions can theorize; but the results worth while will be obtained in the practice of this art and science intelligently, with foresight, and with the principle of constant review and analysis before us.

V. Type of Work.

Examination of applicants for employment is a complex. It involves careful job analysis, the application of employment psychology, estimation of the moral risk, searching physical examination, intricate records, salutary and sympathetic advice to the applicant, a follow-up system, and a summarized report. The forms used on the Cotton Belt are shown on the wall charts. They represent a beginning, not an end produet of the present tendency toward complexity.

Re-examinations of employees is required by law in some States for food handlers only—usually every three months—and this examination covers communicable diseases only. It is very evident to me that the present policy of many railroads to re-examine men in train, yard and engine service *only* after very apparent defects are discovered by fellow workmen, or after serious accidents, is a fault which must be overcome in the near future for the protection of other employees and the public. In no other industry is the re-examination of employees so imperative; yet we must face the fact that in every industry such re-examination is of great benefit to both the employer and the employees. Once every two years seems to be the average interval.

The care of injury cases requires an accessible, competent surgeon and equipment, facilities for transportation, and an emergency station or hospital for bad cases. In no other way will the industrial surgeon justify his existence to the employer more readily than by the expert care of injury cases—and the esteem of the right-minded employee will not be less.

An example of the distribution of local surgeons and emergency stations is shown on the charts. These locations are determined by the incidence of injury at various points, the number of men employed, the competency and accessibility of the surgeons.

The treatment of venereal diseases in industry has been discussed by the writer in the Journal of Industrial Hygiene for October, 1920. The St. Louis Southwestern Railway, from the venereal point of view, occupies the unique position of the only railroad in this country—and so far as I know in any other country—which gives a full service. Before the present campaign, an educational program, a very limited prophylactic service and a complete curative service was maintained by this road. The results are shown in the tables of statistics. You will notice that the end results are not all that could be wished. For this there are of course reasons. Physicians do not like to treat venereal diseases. This attitude leads the patients to think even more lightly of their ailment than is their too frequent custom. Gentlemen, let me leave this plea with you. If you have any conception of what venereal disease means to the welfare of this country, of the amount of lawlessness which it causes, of the great loss to industry, of the suffering of wives and of children, of the financial ruin of families, of the cost to the State for the care of tabetics and the insane, forget the sham of prejudice and look upon this plague as you would upon any other contagious disease—report it, quarantine it if necessary, use every method of prevention, and treat it adequately. Then only will you do your duty to the State which licensed you—the State which has a right in return to expect that you guard faithfully the well-being of the commonwealth.

The dental service is important for the prevention of heart and kidney diseases, and for the cure of many functional and organic affections of the gastro-intestinal tract. A full time dentist is a very essential aid in the industrial medical department of the future. He is another unit in group practice.

The care of other medical and surgical cases does not merit further discussion here. It may however be of interest to know that the injuries and diseases in our experience last year on a railroad employing ten thousand men in the Southern States, may be expected to require more than one thousand days of hospital care each year are in the order of importance: gonorrhea, fractures, intestinal diseases, syphilis, chancroid, crushing injuries, acute bronchitis and malaria.

VI. Equipment and Personnel.

If the industry is spread out over many miles, the method in use generally on American railways is perhaps best suited to the condition. Thus local surgeons, emergency stations and a central hospital serve the needs of employee scattered over perhaps two thousand or more miles. If, however, the industry is compact, then the problem becomes very much simpler. Here an emergency station with full time surgeon and as many assistants as may be needed, with an associated hospital, will give efficient treatment. The personnel must be adequate and competent, the equipment should be adequate. Bear in mind carefully, however, that the wonderfully equipped medical department in industry is not necessarily the one that is doing the best work. The efficieney of the work should demand the equipment, not the equipment the efficieney.

I have spoken of group practice and coordination. For this a competent head for the industrial medical department is essential. Many of these men are employment managers, or in other walks of life. I believe that he should be a physician or surgeon. If it be public health, sanitation, accident prevention, social service, or the routine matters of medicine and surgery, even psychology, who is better trained to correlate all these varied phases of industrial work than the physician or surgeon? By education, by training, by his very outlook on life, he alone should be intrusted with this duty. Why has some one else stepped in? Because the physician has failed to train himself in one particular that looms very large to the business man—his business education. When the physician and surgeon learns to do business in a business-like way, then will he come into his own in industry.

VII. Prevention and Social Service.

From the small industry where the physician must of necessity be his own safety engineer, sanitary engineer, follow-up clerk and social worker, to the large concern where each of these services has its competent head is the natural and proper gamut. However much this subdivision of the work is carried on, the physician must always remain the principal agency for the proper prevention of personal contact infections, focal infections, wound infections, and the lack of personal hygiene—the great causes of disease. But all the services of prevention and social service, no matter how divided, must be correlated, as in all group practice.

VIII. Summary.

If all industry is organized in some such manner as I have outlined what is to become of the physician in private practice? Last fall, at Montreal, Dr. Will Mayo said something to the effect that group medicine must come or the physician would lose his caste, if not his income. Is not this another way of saying that the physician must cease to be a social hermit and become a component part of our social structure? Social structure in the sense of co-operative effort for the community.

Medical literature has been glutted with what surgeons have learned from the war, or how little we have learned. Of one thing there can be no doubt—we did learn co-operation. Industry learned the value of co-operative effort in medicine and surgery. We have already forgotten, many of us, this lesson. Industry never will. Industry requires money, and those who have the handling of it have learned that lesson for all time. The healthy community is the prosperous one. The healthy industrial personnel, is the efficient one. Both of these ideals will be served by the correlated work of physicians and surgeons, who have forgotten the small things and grasped the big opportunity for service, taking with them those scientists whose labor is essential to the purpose.

Management.

I. *Selection and assignment of employees.* Determination of—

a. Physical characteristics needed for each job.

b. Mental characteristics needed for each job.

c. Physical and mental examination of applicants.

2. Placement (physically) (mentally).

d. Periodic re-examination.

2. Public health and sanitation.

a. Prevention of communicable diseases.

(1) Quarantine.

(2) Malaria Control.

(3) Typhoid Control.

(4) Venereal Prophylaxis.

(5) Respiratory disease control.

(6) Other measures.

b. Dental prophylaxis.

c. Periodic free physical examination.

d. Careful physical examination of trivial illness.

e. Provision of facilities for health preservation.

(1) Facilities.

(a) Toilets.

(b) Bathing.

(c) Refreshments—food, etc.

(d) Rest.

(e) Recreation.

(f) Exercise.

3. Treatment of illness and injury, employees, male and female, and families of employees if proper deductions are made.

(a) First aid facilities.

1. Packets, stretchers, etc.
2. Pupils in shops, etc.
3. Local and division surgeons.
4. Ambulance cars.
5. Hospitals.

(b) Central hospital for extensive care and intensive study.

1. Surgical service.
2. Medical service.
3. Dental service.
4. Genito-urinary service.
5. Special service eye, ear, nose and throat.
6. Gynecological service.
7. Pediatric service.
8. X-ray service.
9. Laboratory service.

4. Education.

(a) Instruction of the new employee.

1. Physical care in relation to his new job.

(b) Instruction of foreman.

1. Physical care needed in each process.

(c) Instruction of first aid pupils.

(d) Instruction of physicians.

1. Peculiarities of industrial practice.
2. Advanees and new discoveries.

(a) Encouragement to do post-graduate work.

3. Administration of this department.

(a) Standardization of treatment.

(b) Reports.

(c) General instrnctions.

1. First aid.
2. Communicable diseases.
3. Personal hygiene.

a. Clothing.
b. Food.
c. Recreation.
d. Rest.
e. Exercise.
f. Communicable diseases.
g. Habits.

4. Other public health subjects.

5. Inspection and advice.

(a) Inspection to determine.

(1) Monotony, concentration, isolation.

(2) Speed, overtime.

(3) Ventilation, illumination, temperature, and humidity.

(4) Harmful dusts, gases, fumes, poisons.

(5) Sewage and waste, disposal, toilets, washing and loeker facilities.

(6) Drinking water, food, food handlers.

(7) Congestion, clothing, noise, disorder.

(8) Mechanical safeguards.

b. Investigation of supposedly harmful pursuits and processes.

c. Adviee as to remedies for defects discovered, and the probable result of neglect.

6. Co-operation.

a. United States Public Health.

b. Departments of health.

c. Other industries.

d. Other departments, of the railroad system.

e. Charitable institutions.

f. Medical aid for employee's family.

g. Social aid for employees.

1. Social and financial troubles.
2. Thrift, and domesticity, sobriety.
3. Morality.

7. Study and advaneement.

(a) Compiling and study of own material.

(b) Contribution of the result to the general fund of information on this industry.

(c) Conferences of staff.

(d) Medical and sociological study.

1. Post-graduate study.
2. Soeieties, scientific.
3. Conferenees with others in same and similar industries.

Infancy and childhood are the danger period for tuberculosis, says the U. S. Public Health Service. To protect your child, pasteurize the milk or use certified milk; protect infants and young children from contact with the sick; and keep growing child strong and well by seeing that it drinks milk, eats vegetables, avoids excessive fatigue, and gets enough sleep.

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WILLIAM R. BATHURST, Secretary-Editor
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The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

PELLAGRA AND PROGRESS IN THE SOUTH.

Verily our beloved South—and especially Arkansas—has suffered and still suffers many undeserved handicaps in all efforts toward full development of our resources and increasing in wealth and population. Away back arose the sectional prejudices incident to the war. After the war came the Reconstruction days with all their blighting influences. Many years of slow recovery followed, but with sectional feeling kept alive by politicians long after intermarriages had largely tended to the obliteration of sectional lines between the peoples of both sections. It was not until the Spanish War in which scions of the Blue and Gray fought side by side, that the politicians quit waving the "Bloody Shirt." But, meanwhile yellow fever epidemics had swept portions of the South, not only involving immense losses by business stagnation for months at a time, but by the widespread impression that the South was a hotbed of yellow fever, malaria and other tropical diseases—an impression which retarded development by keeping out Northern and Eastern capital and holding back all prospects of immigration on a large scale.

In spite of these handicaps the South did begin to develop and attract capital and immigration from other States less blessed with fertile soil and balmy climate. As for foreign immigration the South has never held strong attraction save for some immigrants from Southern Europe. Yet with yellow fever banished from every Southern State, malaria no longer a bugbear, with freedom from any sort of serious epidemic for many years the prospects appeared to be wholly favorable until this foolish pellagra scare came along to set us back for years to come and to undo much of the excellent propaganda of the past. The Eastern press in shrieking headlines told of the starving millions suffering from this plague of pellagra because of insufficient food. One reading these screeds might well ask "Why ask contributions to feed the starving millions in war-racked Europe when we have our own starving millions south of the Mason and Dixon line?" That President Harding in his proclamation and Dr. Goldberger with his theories and Surgeon General Cumming, who had accepted the Goldberger theories at face value, were honest in their beliefs is beside the question. The damage by the unfavorable and nation-wide advertising the South has sustained can neither be estimated nor undone for a long time to come.

Of course, we in the South are quite aware of the fact that our people are neither starving nor in any danger of starving, but where the Eastern papers circulate the people can not be persuaded to the contrary. It may be admitted that there are many sections in the South, especially in the mountainous regions where the country is sparsely populated and thousands of dwellings are remote from stores and towns, the people suffer more or less from ill balanced rations. This is largely due to a certain diffidence—shiftlessness might be the better term—by which small farmers raise few vegetables, maintain no cow, grow little if any wheat, eat fresh meat only at rare intervals and subsist largely on corn bread and salt meats.

But, granted that many exist on ill balanced rations, that is quite different from suffering from starvation. And it must be borne in mind that there has been no demonstration that pellagra is caused either by starvation or by rations not scientifically balanced. The experiments of Dr. Goldberger on a certain number of Mississippi convicts are far from convincing and the fact is that the etiology of Pellagra is in the realm of the unknown.

The Italians, many of whom suffer from pellagra in their own country, attribute the disease to some unknown factor in maize and it is indisputable that where pellagra mostly abounds corn bread is practically a staple article of food. Many authorities attribute pellagra to deficient sewerage. Many others believe it is caused by an organism yet to be discovered and the fact that the disease is prevalent in semi-tropical sections and has its season at the same time as do malaria and other hot weather diseases goes far toward strengthening that opinion. As to such as cling to the belief that starvation or insufficient food is the cause may be reminded that in the sufferings of millions during and after the late war in Belgium, Germany, Roumania, and elsewhere, from unsufficient food and actual starvation, pellagra did not develop. In the idea that the diseas is caused either by starvation or ill-balanced rations there would appear to be a confusing of cause and effect. For while, unquestionably, a well balanced ration and sufficient food are most important factors in strengthening resistance to the disease it does not follow that lack of sufficient food or an ill-balanced ration actually cause it. It is equally true that sufficient food and properly balanced rations give resistance to the ravages of tuberculosis. It may also be said that a sufficiency of food properly balanced will restore a pellagra patient to health; but the reverse does not follow that absence of these factors actually cause the disease. On the contrary, it would seem further to establish the fact that pellagra is a germ disease and this should spur the physicians of the South to locate it.

Meanwhile, the South is not starving, thank you. It is not going to starve. But our people must be impressed with the necessity of raising their standards of living in the rural districts. Every man owning a patch of land should raise vegetables, and fruit to supply his needs. Every farmer should, if possible, own a cow and enjoy a plentiful supply of fresh milk and butter. Every man in the rural districts can own enough of chickens to supply his family with eggs and meat. Propaganda of this sort should be carried to every town, village, hamlet, and cross-road throughout the State, as well as instructions in sanitation, disease prevention and the like. If these things be accomplished pellagra will disappear just as yellow fever has disappeared and as malaria, has been put under control.

Personals and News Items.

Dr. and Mrs. J. P. Runyan, of Little Rock, have returned from Colorado.

Dr. and Mrs. S. J. Hesterly of Prescott have returned from their vacation trip in Colorado.

Dr. George S. Brown of Conway and Dr. G. A. Warren of Black Rock, visited in Little Rock this month.

Dr. Homer Higgins and Dr. C. V. Scott of Little Rock are attending the clinics in Chicago.

Dr. T. B. Bradford, of Cotton Plant, read a paper on "Nicotine as It Affects Vision" at the recent meeting of the Rock Island Surgical Association, Colorado Springs, Colo.

Mr. C. P. Loranz, business manager, Southern Medical Association and the Southern

Medical Journal, visited in Little Rock and Hot Springs this month.

Fifteenth Annual Meeting of the Southern Medical Association, will be held in Hot Springs, Arkansas, November 14-17, 1921.

The Sixth Annual Session of the American Congress on Internal Medicine will be held at Rochester, Minn., week of February 20-25, 1922.

FOR SALE—X-Ray Machine, Myers Transformer No. 6, auto and rheostat control; Victor screen for fluoroscopic work; practically new; bargain. Write or call Dr. W. A. Snodgrass, 304 Donaghey Building, Little Rock, Ark.

Dr. S. U. King, Dr. John R. Dibrell and Dr. F. L. French of Little Rock, have been appointed by the Bureau of Pensions at Washington, D. C., to constitute the Board of U. S. Pension Examining Surgeons for Little Rock.

Dr. Thos. J. Bush of Clarksdale, Miss., has moved to El Dorado. Dr. Bush has formed partnership with Dr. H. H. Niehuss. They have opened a private hospital with all the modern improvements of a larger institution. Present capacity is ten beds.

The Tenth Councilor District of the Arkansas Medical Society held its annual session at Fort Smith, September 10, 1921. Dr. W. R. Reeves, of Alma, was elected President; Dr. J. G. Eberle, Fort Smith, Vice President; Dr. S. J. Wolfermann, Fort Smith, Secretary-Treasurer. Fort Smith was selected as 1922 meeting place.

FOR SALE: RADIUM — One Hundred Milligram in Twenty-five Milligram Tubes; all or any twenty-five milligram parts offered at big savings over present market price. Shipped to you direct from Bureau of Standards, Washington, D. C., with Government certificate for same. Container and full set of four screens with each tube. Address Co-Operative Bureau, 535 North Dearborn St., Chicago. (Advertisement.)

"Sure cures" for tuberculosis are probably as old as the disease itself, says the U. S. Public Health Service. Hypophosphites, creosote, "Lymph" inhalents, serum and the Friedman cure have all come—and gone. Just now some old devices in new forms are being acclaimed in the Southwest. But, "I can't say yet what medicine cured me," said the testimonial writer. "I ain't heard from but three sure-cure companies yet and I'm waiting for bids from the advertising agents of two more."

In a paper by Dr. J. C. Bloodgood, read before a recent meeting of the State Medical Association of Wisconsin on "What Surgery Has Accomplished in the Permanent Control of Cancer," he said: "Cure of cancer is ineffective, and control of the disease must be by treatment before the disease develops or while it is in an early stage. The problem is primarily one for the public in getting medical advice as soon as there is a possibility of cancer."

ANNOUNCEMENT—SOCIETY OF ANESTHETISTS.

Plans are under way to organize a Southern Society of Anesthetists, at Hot Springs during the coming session of the Southern Medical Society there November 14-17.

This rapidly growing and now fully recognized specialty has had no society devoted to its welfare and advancement in the South, while for some years such aggressive and wide-awake organizations as the Interstate Association of Anesthetists, the American Association of Anesthetists, and others are developing the specialty in other sections of the country.

Those interested in such an association are requested to communicate with Dr. W. Hamilton Long, Organization Secretary, 1922 Deer Park Ave., Louisville, Ky.

GOLF!

Medical Championship of the South.

To be held at Hot Springs, Arkansas, during the Southern Medical Association meeting in November.

A. Championship of the South—18 holes low medal score.

B. Handicap Championship—All players are requested to obtain their handicap from home club and present it with par score for home course. Play for handicap champion-

ship will be at the same time as the championship round.

If it is possible, four-men teams from various clubs or cities will decide the Southern team championship.

Entries are requested at earliest moment.

E. R. Smith, *Chairman.*

Dugan-Stuart Bldg., Hot Springs, Ark.

TRI-STATE MEDICAL SOCIETY.

The Tri-State Medical Society will hold its annual meeting in Shreveport, La., December 7, 8, 1921. Dr. Frank H. Walker, President; Dr. Nettie Klein, Secretary.

We hope to repeat our successful meetings, having secured excellent papers from some of the foremost physicians of this country. Should you be interested in any of the following subjects, send your name with title of your paper to the proper section chief. We hope to have our program issued early in November, so please send in your subject early.

The following are the section chiefs:

Medicine—Dr. Thomas P. Floyd, Shreveport, La.

Gynecology—Dr. E. L. Beck, Texarkana.

Surgery—Dr. Joe Becton, Greenville.

Eye, Ear, Nose and Throat—Dr. R. H. T. Mann, Texarkana.

Urology—Dr. S. Y. Alexander, Shreveport.

Miscellaneous Topics (Pathology, Dermatology, Anesthesia, X-ray)—Dr. Wm. R. Bathurst, Little Rock.

A CLINICAL MEETING WITH AN ALL-STAR CAST.

An attractive innovation in medical meetings has been undertaken by the Mississippi Valley Medical Association, to be held in St. Louis on October 13, 14, and 15. For this occasion a most unusual program, entirely free from the ordinary trite and formal medical paper reading, has been arranged.

Program participants have been carefully selected from eminent specialists among the leading authorities in the various fields of medicine. The preliminary announcements contain such names as Dr. Llewellys F. Barker, of Baltimore; Dr. Anthony Bassler, of New York; Dr. Chas. E. Frazier, of Philadelphia; Dr. John de J. Pemberton, of Rochester, Minn.; Dr. Isaac Abt, of Chicago; Dr. C. Jefferson Miller, of New Orleans, and others of equal prominence. These noted clinicians have accepted invitations to give scientific addresses (not papers) consisting of clinical demonstrations and discussions upon borderline subjects pertaining to their particular specialties. Because of their clinical bearing and wide medical scope, the subjects chosen will undoubtedly be of more interest to the general practitioner than to the specialist.

The third day of the program will be given over to clinics in the various St. Louis hospitals and universities, at which the guests of this Society, as well as St. Louis physicians, will participate.

The date of this meeting coincides with the Centennial Celebration and Pageant of St. Louis, which event will no doubt afford additional means for entertainment and social enjoyment to those attending this meeting. Dr. William Engelbach, University Club Bldg., St. Louis, is chairman of the Committee of Arrangements and will gladly answer inquiries requesting further information.

ANTI-TOBACCO CAMPAIGN.

To County Superintendents, S. I. A.s, Y. M. C. A.s, Women's Clubs, or any organization doing work for the growing child:

I am arranging to go into most if not all the larger places in the State for one or two days' campaign of education against the use of narcotics in the growing child, and if any of the above mentioned organizations desire that I should talk before any body of individuals and will arrange to defray my expenses while there I shall be very pleased to work for them, and do my best to make it instructing for the hearers.

I am especially interested in the campaign against the child taking up the tobacco habit and this will be a sort of missionary work, in which I have already been informed that many of you are interested. It will therefore be a mutual pleasure if you can arrange for me.

If the above organizations will communicate with me at my home address, I can arrange my itinerary with the least amount of lost motion and expense. For instance, if I were in the neighborhood of Bentonville, there are many places near by which ought to have me,

in order that railroad fare could be done with the minimum outlay. If I am in Fordyce, then I am contiguous to lots of places likewise. So, if you are interested, and I am loath to think you are not, please write me that you will make my stay your burden. Let me know in your letter to whom I shall apply when in your community. I am sending this communication to the Arkansas Methodist, The Baptist Advance, The Arkansas Teacher and the Journal of the Arkansas Medical Society, with the hope that each will use it, giving thereby as much publicity as possible to the work.

Dr. T. B. Bradford,
Educational Director No-Tobacco Army Ark.

THE MODERN METHOD OF FEEDING INFANTS.

Modern infant feeding calls for a formula suited to the individual requirements of the individual baby. The physician now realizes that an infant deprived of breast milk must be fed as an individual. The nourishment from the infant's food is principally derived from cow's milk. The "foods" contain no mysterious life-giving elements but are used as modifiers. As such they are indispensable for their carbohydrate content, the added carbohydrate being necessary to make up for the loss of carbohydrate when cow's milk is diluted with water. It is also important that these "foods" are given as carbohydrates and should not contain a mixture of vegetable protein and fat, since the cow's milk supplies animal protein and fat in proportion suitable for the growth of most babies.

Infant feeding should be directly under the control of the physician. Realizing this important fact, Mead Johnson & Company, of Evansville, Indiana, have manufactured a line of Infant Diet Materials suitable for the individual requirements of the individual baby. These products do not carry laity directions on the trade packages. Such directions on a package of food is the unsurmountable wall that differentiates between individual infant feeding and indiscriminate infant feeding. The physician may prescribe Mead's products with perfect confidence.

Mead's line of Infant Diet Materials consist of Mead's Dextri-Maltose (Dextrins and Maltose), Barley Flour, Dry Malt Soup Stock, Casec (Calcium Caseinate—for preparing Protein Milk), Arrowroot Flour and Cerena, all of which are supplied without any directions on the packages. Over and beyond the gratifying results obtained from Mead's products, the physician is given unlimited scope to his own creative talents, hence there will be a greater number of better babies in his immediate neighborhood. The mother who uses Mead's Diet Materials at the direction of her physician is disposed to place credit for the welfare of her baby where credit belongs, *i. e.*, to the doctor. The Mead Johnson policy means the realization of an ethical ideal.

TO PUBLIC HEALTH OFFICERS, PHYSICIANS, CLINICIANS, NURSES, SOCIAL WORKERS, AND OTHERS INTERESTED.

In response to a preliminary announcement of the Public Health Institute, which the Public Health Service had planned to hold in Washington next fall (but which has been postponed indefinitely), a large number of city and county health officers, physicians, nurses and others replied indicating a definite intention or hope of attending.

The Public health Service has felt that it could not ignore this widespread interest in institute work, and after correspondence with the various State Boards of Health, has decided to hold a series of twenty-four institutes at various population centers throughout the country.

It is expected that most of the well known specialists announced for the two-weeks' institute at Washington will be on the faculties of two or more of the various local institutes. Inclosed is a schedule of courses which will probably be adopted, with various alterations, by most of the institutes. No tuition will be charged.

Last year four times as many persons attended the Venereal Disease Institute as were expected.

In case you hope to attend any of these local institutes ample notice should be given, in order that adequate plans may be made.

TENTATIVE SCHEDULE OF DATES.

Hot Springs*, October —.
Jacksonville, November or December.
New Orleans, January 9-14.
Columbia, January 9-14.
Dallas, January 16-21.
Birmingham, January 16-21.
Memphis, January 23-28.
Louisville, January 30-February 4.
Indianapolis, February 13-18.
Pittsburgh, February 20-25.
Chicago*, Mareh 13-18.
Kansas City, April 10-15.
Denver, May 1-6.
Washington, Late in May.

* The Hot Springs, Ark., and Chicago institutes will deal only with problems of venereal disease control.

Obituary.

DR. W. F. ROSS.—William F. Ross, M.D., Booneville, age 60, died August 10, 1921. He is survived by his wife and two children.

DR. W. L. HERROD.—Willis Lee Herrod, M.D., Cabot, age 58, died August 28, 1921. He is survived by his wife, three sisters and two brothers.

DR. A. L. CARMICHAEL.—Aaron Lee Carmichael, M.D., Little Rock, age 43, died August 28, 1921. Dr. Carmichael was born in Missouri and graduated in medicine at the University of Arkansas. He is survived by his wife, three daughters, his mother, a brother and three sisters.

County Societies.

LAWRENCE COUNTY.

(Reported by H. R. McCarroll, Sec.)

The Lawrenee County Medical Society met in Hoxie, Wednesday, September 7, 1921, at 4:00 p. m.

Present: C. C. Ball, A. J. Clay, T. C. Guthrie, W. W. Hatcher, J. C. Hughes, J. C. Land, H. R. McCarroll, C. C. Townsend, and Frank D. Smythe and Mrs. Brown as visitors.

Dr. Frank D. Smythe of Memphis, read a paper on "Suturing of the Muscle-spiral Nerve and the Transplantation of the Tendon of the Flexor Carpi-Radialis to the Tendons on the Back of the Forearm for the Restoration of Wrist Drop, following the injury or Severing of the Muscle-spiral Nerve." Some cases were reported. This is comparatively a new operation, and in selected cases will render a great service to humanity. It stands as a monument to the late John B. Murphy.

The papers were well discussed and some valuable information was brought out to the advantage of all present. Dr. Riley Henry Guthrie, of Smithville, was unanimously elected to membership.

Mrs. Mary Ellis Brown of the Bureau of Vital Statistics was present and made us a good talk. Come again.

JEFFERSON COUNTY.

(Reported by J. T. Palmer, Secretary.)

At a joint session of the Jefferson County medical Society and the Southeast Arkansas Dental Association which was held in Pine Bluff, at the Pine Bluff Country Club on September 12, 1921. Present: Dentists, Drs. Sisson, DeWitt; Crume, Hamburg; Hutchinson, Monticello; Sims, Eudora; Mayfield, Payne, Whittle, Robertson, O'Daniel, Johnson, Jones, Stephens and Blair, of Pine Bluff. Physicians, Dr. Isom, of Dumas; Dr. Crump, toastmaster; Vines, Gill, Lowe. Hankinson, John, Breathwit, Luck, Woodul, Lemon, Pittman and Palmer, of Pine Bluff.

The subjects for discussion were "Inter-Relation of Dentists and Doctors," "Focal Infection," and "Dental Prophylaxis in Childhood."

The discussions were free and lengthy and each man who wanted to talk had his say. The prelude to the main program was a five course dinner, well served and much enjoyed.

This event marks the first of a contemplated series of get-together meetings of the physicians and dentists of this county, working toward the alleviation of suffering humanity wherein the physician and dentist are jointly related.

Book Reviews.

Rational Treatment of Pulmonary Tuberculosis.—By Dr. Charles Sabourin, Medical Director of the Durtol Sanatorium, Puy-de-Dome, France. Authorized English translation from the sixth revised and enlarged French edition. Published by F. A. Davis Company, Philadelphia. Price $3.50.

The contents of this volume is divided in three parts, namely, "The Curability of Tuberculosis," "The Rational Treatment of Tuberculosis," and "Social Hygiene of the Tuberculous."

The Medical Clinics of North America (New York Number), Vol. 4, No. 5, March, 1921. Published by W. B. Saunders Company, Philadelphia, bi-monthly. Price per year, $12.00.

Nineteen articles of unusual interest are shown in this issue of the Medical Clinics of North America. Dr. Warfield Longcope, Presbyterian Clinic, presents three cases of "Jaundice Following the Administration of Arsphenamin."

Eye, Ear, Nose and Throat Nursing.—A. Edward Davis, A.M., M.D., and Beaman Douglass, M.D. Second Revised Edition. With thirty-two illustrations. F. A. Davis Company, Publishers, Philadelphia. Price $2.50.

This valuable little book is meant simply as a guide for nurses and students in the care of the various diseases of the eye, ear, nose and throat, and to instruct the nurse as to her exact duties during and following operations upon these organs. A new chapter has been added on Vaccine and Serum treatment.

The Surgical Clinics of North America. Volume I, Number 3 (Boston Number). June, 1921. 345 pages, with 159 illustrations. Published by W. B. Saunders Company, Philadelphia. Per clinic year, paper, $12.00 net; cloth, $16.00 net.

This number is made up of clinics in Boston. Dr. John Homans presents the status of the treatment of malignant diseases of the large bowel in his article on "The Symptomatology of Carcinoma of the Large Intestine," in which he points out the common manifestations of cancer in this location.

The Surgical Clinics of North America. Feb., 1921. Volume I, No. 1 (Philadelphia Number). Published bi-monthly by W. B. Saunders Company, Philadelphia. Price per year $12.00.

This number describes ten of the large Philadelphia clinics, and an introduction by Dr. William W. Keen. As Dr. Keen says, "It is most appropriate that the initial volume of the work should be the Philadelphia number." Among the well known contributors we find the names of Deaver, Da Costa, Frazier, Ashhurst and others, that in itself is sufficient to recommend the Surgical Clinics to our readers.

The Surgical Clinics of North America (New York Number), April, 1921. Issued serially, one number every other month. Volume I, Number 2. 326 pages, with 116 illustrations. Per clinic year (February, 1920, to December, 1920). Published by W. B. Saunders Company, Philadelphia. Paper, $12.00 net; cloth, $16.00 net.

Of the several clinics given in this number we wish to make mention of the clinic of Dr. Willy Meyer, Lenox Hill Hospital, on the "Importance of Posture in Post Operative Treatments." Dr. Meyer is of the opinion that "Posture" is one of the most powerful means at our command to hasten recovery and avoid complications. In this article he cheerfully considers two—the slight Trendelenberg posture and Sims' posture, or the latter more exaggerated, the abdominal posture.

The Medical Clinics of North America (issued serially, one number every other month), Volume 4, Number 6. By Boston Internists. Octavo of 297 pages, including complete index to Volume 4, and thirty-five illustrations. Published by W. B. Saunders Company, Philadelphia. Per clinic year (July, 1920, to May 1921), paper, $12.00 net; cloth, $16.00 net.

Among other instructive articles in this number Dr. Henry A. Christian, Peter Brigham Hospital, refers to the "Right and Wrong Uses of Diuretics" without going into the details of the pharmaceutical action of the drugs used as diuretics and without undertaking to discuss their action in an exhaustive way, he gives a brief resume of the present conception of renal activity in relation to the action of diuretics. He also says that diuretic drugs should never be used because of a diagnosis of renal lesion.

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Original Articles.

HISTORY OF THE CARE OF THE INSANE.*

C. C. Kirk, M.D., Little Rock.

In the early history of the human race insanity was not recognized. However, as we read the history of the early days we have no trouble in recognizing certain types of mental disorders. It would appear that Nebuchadnezzar was insane. To quote from the book of Daniel, "Nebuchadnezzar was driven from men, and did eat grass as oxen, and his body was wet with the dew of Heaven, till his hairs were grown like eagles' feathers and his nails like bird claws. And at the end of the days, I, Nebuchadnezzar, lifted up mine eyes unto Heaven and mine understanding returned unto me." Saul was governed by a bad spirit and melancholy disposition. He attempted to take the life of the young boy, David, while he was playing on the harp for him.

Epilepsy was not recognized as a disease; but was attributed to demoniacal possessions. The Bible states that in the days of Christ "Through his miracles many evil spirits were cast out of human beings." Mohammed was an epileptic, as was Julius Caesar and Napoleon Bonaparte; although it is questionable whether either Mohammed or Napoleon were truly insane at any time during their career. Julius Caesar was becoming mentally deteriorated, as he was developing grandiose delusions before he died, believing that he was divine, and attempted to convince Cleopatra that she was a direct descendant of the goddess Venus.

It seems possible that the Apostle Paul was an epileptic, as he spoke of his infirmity, "the thorn in the flesh." In the early days when superstition ruled the world, the insane were looked upon with a great deal of reverence or fear. They were supposed to be under the influence of witches, these witches having the ability to transform themselves into beasts or to assume any shape they wished.

It is probable that Bethlehem, or Bedlam Hospital, which was established near London in 1247, was the first institution to care for the insane. The treatment was very cruel and inhuman. John of Goddesten, court physician to Edward II, about 1320, used a magic necklace for the treatment of epilepsy. In 1403 patients were permanently received in the old Bedlam Asylum from a building known as the Stone House, Charing Cross. In this transfer we have the following description:

"There was a clanking of chains, and the swish of a whip, volleys of violent abuse and appalling blaspheming, peals of ribald laughter from the roistering mob, and the threats of the spearmen to the mud-slingers. Such perhaps may have been the scene when patients from the Stone House, Charing Cross, passed into an institution forever associated with the keeping and healing of the disease of brain and nerve."

The placing of insane patients inside of a church or cathedral and making them remain over night, and terrified in every possible way was a common form of treatment. It was thought that the sacredness of the surroundings had a tendency to drive out the evil spirits from the afflicted one. The ducking of maniacs and the use of whips and ligatures were supposed to exhaust their fury and instill into them that sense of terror which tames a wild beast. "The mad Henry, of Fordwich, was dragged by his friends to the tomb of the chapel with his hands tied

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behind him, struggling and yelling, and there remained all day; but began to recover as the sun went down and, after a night spent in the church, returned home perfectly well in his mind."

In Pepys' diary it states that Charles II threatened to send some of his courtiers, as well as his mistresses, to Bedlam, especially Nell Gwyn, when she threatened to throw her two illegitimate sons from the windows of her apartments unless his Majesty Charles II would publicly acknowledge them to be his own.

George III was confined in the Bedlam Asylum in 1762, when he was only twenty-four years old; and his last incarceration was in 1810, when he was seventy-two years old and practically blind.

In the days of James I the loafers about town and the curiosity seekers paid a few shillings to see the show at Bethlehem. For a certain fee the keepers would exhibit their patients for the amusement of the mob, calling out loudly the eccentricities as they passed by the wicket gates in their foul smelling cells.

In 1815 the House of Commons appointed a committee to investigate the various insane asylums throughout the kingdom. It was shown that one superintendent had been drunk and insane for ten years. It also showed that the Board of Governors were negligent of their duties; that their visits were infrequent, and their inspection superficial. From 1778 to 1786 the padded chair and padded room were becoming popular, and were looked upon as humane. In 1793, Pinel, medical director of the hospital in Paris, asked permission to remove all irons then in use; but they thought that he was insane because he thought of letting loose such wild beasts. The chains and dungeons then in use were later discarded.

We quote from Dr. Henry Hurd's article, "Three Quarters of a Century of Institutional Care of the Insane in the United States":

First—The Period of Neglect.

"This period of neglect existed from the settlement of the country down practically to the opening of the Utica State Hospital in 1843. It is true that sporadic efforts were made in certain communities to provide for a few of the more urgent cases of insanity; but there was no concerted or sagacious plan of action or any conception of the magnitude of the undertaking. The first effort as has often been pointed out was made in Philadelphia in connection with the Pennsylvania Hospital for the insane in 1754. In the original appeal for funds to provide for building the Pennsylvania Hospital the express intention was to provide a place for insane people. This term insane, however, referred at that time more especially to such persons as were violent and required custody to prevent them from doing injurious acts toward their neighbors or themselves. The care thought of was almost wholly custodial and for a long time, and probably until the time of Dr. Rush, little was attempted in the way of medical treatment. Such patients were provided for in dark cells in the basement of the hospital.

"In the excellent history of the Pennsylvania Hospital, written by Dr. Morton, interesting details are given of the character and conduct of these patients, as described in the notebooks of one of the trustees. It was customary at that time to exhibit the patients to the public on certain days for a trifling pecuniary consideration. It is evident as the history of the hospital is carefully scanned that the arrangement was not a satisfactory one and that general hospital patients and insane patients mutually rejoiced when the transfer of the insane was made to the new hospital in West Philadelphia in 1841.

"The institution at Williamsburg, Virginia, seems to have been the first hospital in the United States designed exclusively for the care of the insane. It was provided by the House of Burgesses in 1769 and opened in 1773. It was under the charge of a keeper, who was made responsible for its internal and financial management and was evidently largely a house of detention. The medical care was confined to a physician who visited the institution, but did not have any responsibility in its management. It seems to have received, but was not in any sense an institution for the neglected or destitute insane.

"Next in order of erection was a department for the insane connected with the New York Hospital, afterwards known as Bloomingdale Asylum and now as Bloomingdale Hospital; but in 1809 it was thought advisable to build a separate institution in the upper part of the city. Aid was sought from

the Legislature and granted for that purpose. This separate institution subsequently developed into the Bloomingdale Hospital now at White Plains.

"The McLean Hospital was founded in 1818 as a department of the Massachusetts General Hospital, and was finally built upon an entirely separate estate, and had an independent existence.

"About the year 1817, having heard of the success of the York Retreat in England, under the care of the Tukes, the members of the Society of Friends established and located the Friends' Asylum at Frankfort, in a suburb of Philadelphia, which did excellent work for many years in a quiet, modest way, principally for members of the religious Society of Friends.

"The institution which exerted the most influence in New England and undoubtedly fostered the establishment of several institutions for the insane of a semi-private class, was the Hartford Retreat, originally built in consequence of a movement initiated by the Connecticut State Medical Society, the members of which furnished the funds, it fortunately came under the guidance of Dr. Eli Todd, who became the first superintendent, and seemed to have had a general interest in the better treatment of the insane throughout the New England States. This institution received private patients; but also had an arrangement with the towns of Connecticut to receive indigent patients at a rate of payment less than the actual cost of the treatment."

Second—The Period of Awakening.

"It is to be regretted that owing to pioneer conditions it was not practicable to develop the care of the insane in America in a natural way and thus evolve a system which was adapted to the needs of the country.

"Unfortunately, the insane and delinquent classes became early identified with each other. In many Eastern States the only insane cared for were those already paupers, and frequently, as in New Hampshire and Connecticut, were bid off each year by persons who were prepared to assume charge of them at the lowest figure. It consequently happened that most of those who were able to look after themselves were allowed to wander about through the country exposed to hardships, danger and ill treatment. If they were violent and destructive they were cared for in cages or foul-smelling pens in county houses or placed in jail. No systematic effort was made to assume care of any of these patients at a stage of their disease when they were in condition to receive benefit from treatment; they were neglected until incurable, and when incurable were taken care of in the cheapest manner possible without regard to their comfort and well-being. This condition of affairs existed throughout the United States; and no State, unfortunately, can claim monopoly of ill treating the insane. There may be said in excuse for such hard conditions that the majority of the inhabitants of the United States, both in New England and in the newer portions, were struggling for a living and needed all the resources which they could get together to care for themselves and to develop new settlements and homes in the dense wilderness.

"The era of awakening came slow in America and came like a popular wave in the various States and resulted in the establishment of the institutions in nearly all the eastern commonwealths, as well as in what are now known as the Central States."

Third Period—State Care of the Insane.

"In 1830, Governor Troupe, of New York, in his annual message to the General Assembly, stated that over 600 insane paupers in the State were either in jail or at large. In 1836, Drs. Coventry and McCall presented a memorial from the Medical Society in the State of New York, requesting the immediate establishment of an asylum, the result of which was the passage on March 30, 1836, of 'An Act to Authorize the Establishment of the New York Lunatic Asylum.' On January 16, 1843, this institution at Utica, New York, was completed and during the year 276 patients were received. This was among the first asylums in the United States built exclusively by the State for the care of the State's indigent insane.

"About the year 1850, provisions for the insane of the United States began to be considered a State duty. This does not mean that all the States were provided with institutions for the insane, but merely that the

attention of the public was directed through the necessity for State care, and one State after another began to erect a single institution for the insane. It must be confessed that the conceptions of physicians and Legislature as to the extent of the problem providing for the insane and the best way to meet it were vague and the measures adopted proved to be in every instance deplorably inadequate.

"The experience of New York well illustrates the difficulties which were speedily encountered. The Utica State Hospital was located originally near the geographical center of the State with the expectation that this institution would be ample and that all the patients in the State would be sent there for treatment. After a time it was found that the institution was filled and that the only way to secure any room for acute cases was to encourage county officials to remove their patients to almshouses in order that preference might be given to cases of acute disease.

"Another great error in caring for the insane in the early days arose from the theory that institutions should remain small and attempt was made to limit the size of the institutions to the end that the superintendent might personally direct the whole treatment of every patient. Under the circumstances very little effort was made to appoint or develop assistant medical officers and the superintendent became superintendent, physician, steward, and general utility man. The era of awakening was an era of experimental effort involving much groping in the dark and much waste of money.

"Many mistakes were committed, but the outcome of the movement was State care as a policy throughout the United States. At the present time we do not recall any State that has not taken complete charge of its insane and delinquents.

FOURTH—PERIOD OF SCIENTIFIC CARE.

"The period of scientific care which brings us down to the present day looks to the study of mental diseases, their causes and development, and the study of local conditions and surroundings of insane patients to ascertain the cause of the disease and the best method of preventing its development. It also looks to the after care of patients and the study of social conditions in order to promise to patients discharged from the institution a reasonable prospect that a fresh attack of mental disease may be prevented by proper home surroundings. We are coming to apply scientific tests, such as the Wassermann reaction, and by so doing have cleared up much obscurity in the development of paresis. The same is true of the latest knowledge of the relations of internal secretion to bodily metabolism.

"It is now strongly impressed upon the minds of the profession that to cope with insanity in a given locality there must be a close relation between the institution and the region round about it, also that patients coming voluntarily to institutions in the incipient stages of the disease which precipitated the first attack, may be removed before they become operative; and that wise counsel may be given through the period of convalescence. We are now doing away with all manner of restraints and the non-restraint method of treatment is now in style.

"The various States are considering wisely the handling of their insane criminals and suitable institutions are being erected for the scientific care of these unfortunate human beings.

"The great problems of the future will be the study of the prevention of insanity and of the delinquent classes. What the next two or three centuries will bring about in this direction is a happy one to contemplate. Preventive medicine is the great scientific problem of the day and the conserving of the human race is a fact devoutly to be wished.

"Are we to keep on building more and larger asylums, or are we in the future to turn our thoughts and endeavors to the prevention of the unfit class of society? Our insane are now cared for better in institutions than they can be cared for in their own homes. This is as it should be, the State should accept the responsibility; but the State should also accept the fact that insanity is on the increase and that we have a great many more delinquent and feeble-minded than we dreamed of in former years.

"I believe that we will always have insane and delinquent classes, but it seems to me that they should be minimized, and I believe

that a commission of competent men and women in every State should be appointed to study the great problem of prevention, thereby helping to bring about the often dreamed of millennium.

Today when a patient arrives at our hospital he is immediately taken to the receiving ward, given a bath, placed in bed, temperature, pulse and respiration taken, and he remains in bed from three days to one week. This is done for the purpose of establishing in the mind of the patient the fact that he is in a hospital and not in a prison; that he is among friends, and that he is being treated as any sick person would expect to be treated. Too frequently the sick man is arrested by the sheriff, placed in jail, and is brought to the hospital handcuffed and roped. Is it any wonder, then, that the patient feels that he is looked upon a criminal?

During the first few days of his residence on the receiving ward the physician in charge makes a superficial examination to determine the immediate needs of the patient. Observation notes are made to determine whether the patient is oriented; whether there are any delusions, hallucinations, illusions, memory or judgment defects, attention or comprehension disorders; whether or not the patient is depressed, elated or indifferent. Note is made of the patient's facial expression, his conduct, whether there are any mannerisms or stereotype movements, whether or not the patient appears to be schizophrenic; whether there is any incoherence, flight of ideas, distractability of attention, convulsions, impulsive acts, and any other symptoms that would aid the physician in coming to a conclusion relative to his psychosis. At the same time the pathologist secures a specimen of urine and a specimen of the patient's blood, which are thoroughly examined; a routine Wassermann is made, followed by an examination of the spinal fluid whenever syphilis is suspected. The dentist makes a thorough examination of the oral cavity, recording the number of teeth that are in good condition, those missing, and whether or not there is any pyorrhea. Usually within ten days or two weeks the physician in charge, the pathologist and the dentist have completed their examinations of the patient; he is then presented at a staff meeting conducted by the superintendent in the presence of the entire staff. The physician in charge presents the patient with a diagnosis at which time the other members of the staff discuss the case relative to the diagnosis and treatment. After the classification is made the patient is then placed on a ward in which patients of his type reside; for example, we have specific wards for epilepties, feebleminded, convalescents, criminals, tubercular, mildly deteriorated and severely deteriorated cases, senile cases, chronic sick and acutely sick. The receiving ward is equipped with continuous bath tubs and closely connected with the hydrotherapy operating rooms. The acutely maniacal cases are immediately given hydrotherapy treatment. We find this much more satisfactory than the old methods of restraint, seclusion and the use hypnotics. It is not unusual to pass over several days without the use of a hypnotic for the purpose of quieting disturbed patients. The acute sick wards, or infirmaries, are equipped with modern operating rooms, and major operations are performed whenever necessary by the most skillful surgeons of the city. Occupational therapy is one of the most satisfactory methods of treatment; more than 50 per cent of the patients are obliged to indulge in certain kinds of occupation. Psychotherapy and psychoanalysis are useful in certain early cases.

Seventeen years ago, when I went into this work, our knowledge of psychiatry was limited. The classification then in use was very cumbersome, indefinite and misleading. We made no physical or mental examinations of our patients that were recorded, consequently many patients came to the hospital who were not psychotic; nevertheless they were kept in the institution because they were declared insane by a court, and oftentimes, through fear and lack of understanding, the patients were not permitted to leave the institution during their lifetime. Today, after a diagnosis is made, we are fairly certain as to the subsequent course of the psychosis. A few years ago we used to resist the removal of all patients. Today we are so sure of our ground that we do not hesitate to ask relatives to remove certain patients who have recovered from their psychosis. In the olden days we rarely ever acknowledged that a patient was sent to the institution that was not insane.

In the year 1919, there were 49 patients admitted to our institution who were not insane; in 1920 there were 27 patients who were not insane. In the old days it was improbable that these cases would have been properly diagnosed and very likely would have been cared for in the institution year after year.

The number of patients paroled from the institution has been increasing over a period of years because of our better knowledge of the insane and the more efficient treatment they are receiving. In 1919, 756 patients were paroled, and in 1920, 798. In 1919, 238 patients who were on parole were returned, and in 1820, 281 patients who were on parole were returned. So you can see that about 75 per cent of our patients who are paroled never return to the institution. Had it not been for the present parole system our doors would have been closed long ago; as it would have been impossible to have cared for all the patients seeking admission. The old adage that was supposed to have been over the doors of lunatic asylums which said: "He who enters here leaves all hope behind," does not apply to the modern, progressive institutions of the present day. Hundreds of feeble-minded, epileptic and psychoneurotic individuals over the State have transitory periods during which they require the treatment of skilled psychiatrists. After this episode passes they are able to take their places in society and may live out their lives without any further mental trouble. The individual of an inherent mental weakness does not stand the strain of mental conflicts or disease as well as the normal individual; but it does not mean that he must necessarily be confined in an institution for the insane.

A better day is dawning for the mentally afflicted. The future will find very little, if any distinction made between the hospital where the physically afflicted are treated and the hospital where the mentally afflicted are treated.

The trend of the times is away from the doctor. The physician has administered himself into a back seat, but down in the front ranks from which the doctors have withdrawn gladly, what demons are seating themselves?

CANCER OF THE RECTUM. MY METHOD OF PERFORMING PERINEAL PROCTOTECTOMY.*

Jno. L. Jelks, M.D., F.A.C.S., Memphis, Tenn.

Malignant growth of the rectum may be classified as of two varieties. Sarcoma composed of unripe connective tissue, rich in cells, and carcinoma with its subdivisions depending upon the origin of the epithelium.

Cause.—Many theories have been advanced as to the cause of malignant tumor formation; but none have been accepted. There are several conditions that seem to be predisposing; but no condition of itself is sufficient to account for the origin of the new growth. The theory of fetal residue or embryonic rest advanced by Conheim from the suggestion of Virchow, is that germinal tissue during the development of the embryo has become displaced or separated from its normal connection, or perhaps has failed to undergo involution, and maintain its embryonic character. Stimulation of the growth of the center of embryonic tissue may be caused by increase of nutrition, or decrease of resistance to growth, or by physiological increase or decrease of local or general growth. This theory is given marked consideration by surgeons who have written on the pathology of carcinoma.

Heredity.—A careful study of a large series of cases merits the conclusion that the most that is transmitted is a tendency which may be overcome, and usually is. Malignant growths, however, seem to be on the increase, and apparently follow civilization and city life, which may be due in part to more correct methods of diagnosis both ante and post mortem.

Sex in Cancer of the Rectum.—The male sex is more prone to malignancy of the rectum than the female in proportion of 5-2. No solution has been found for this fact. If you will pardon my own personal reference, I have found that the percentage of cancers of the rectum in my own cases about equal in both sexes.

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Age.—Cancer of the rectum occurs at almost every age, but maximum frequency is between the ages of forty-five and fifty-five.

Site of Disease.—Wherever epithelial cells are found carcinoma may occur. Heiman reports of the 20,054 cases in Prussian hospitals, who died of carcinoma, over 50 per cent were located in the intestinal tract. 2,910 of these were in the intestines out of which number 1,204 were in the rectum.

In a collection of 45,906 cases from German and French hospitals, 4.8 per cent were cases of rectal cancer, and if the cases of cancer of the sigmoid are added to these preceding cases, the percentage is raised to 6.2. This shows that in a large series of deaths from cancer of all parts of the body that 6.2 per cent were situated in the rectum and sigmoid. The anal area up as far as the internal sphincter is the site in about 6.7 per cent of rectal cases. The rectum for two inches upward from the internal sphincter shows a proportion of 26.3 while the remainder of the rectum is the site in 67.

The subject of cancer is yearly becoming more and more prominent in the minds and work of the physicians and surgeons, because cancer is evidently becoming more prevalent. Too large a percentage of cancers are undiscovered or not diagnosed as cancer until surgery offers very little if any hope of a cure. Cancers of the stomach, intestines and rectum are most often referred to me after the time has elapsed in which I could say to a patient "you have a fair chance of recovery and a permanent cure." Seventy-five per cent of all cases of cancer of the stomach presented to me during the last ten years, and 50 per cent of all cases of cancer of the rectum during the same period have been refused operative interference, because they were hopeless.

Practically all such cases had a pre-cancerous pathology, which could have been removed, thereby warding off a condition which would destine the destruction of life. All such cases likewise had an early cancerous period during which the physician could, in most instances, easily detect by digital touch a growth in the rectum and refer them to a competent proctologist with good hope of recovery and a cure. Therefore, my endeavor should be to impress upon your minds, please, the fact that an intestinal cancer may have become almost, if not quite, too extensive to offer hope of surgical interference before the classic symptoms are complained of. Hence, the great importance of making early examinations after the most approved methods, viz: by digital touch and proctoscopy or procto-sigmoidoscopy in all cases in which pain or other symptoms of pathology are complained of.

I have quite a number of patients with cancer of the rectum referred to me who complain solely of obstinate constipation, or a little diarrhea. One thought she had appendicitis. Frequently fistula cases have been referred, wherein I find either cancerous or syphilitic strictures above the fistulae. It is not uncommon after proctoscoping a patient for making an examination to learn the cause of diarrhea which has lasted over a period of months or years, to find single or multiple tumors; adenomata, which in the end are prone to become malignant. More especially is this liable to occur in the so-called cancer age; but likewise in younger subjects.

The saddest cases I have referred to me are young men and young women twenty-five to thirty-five years of age for whom physicians had frequently prescribed purgatives for the relief of a constipation, which was, in fact, an obstipation due to the presence of a cancerous tumor which had become inoperable. One case of cancer of the rectum had been operated on by a surgeon for hemorrhoids, for which a fee was collected just three weeks before I saw him, for what I believed to be an inoperable cancer of the rectum three inches above the anus and within easy palpable reach of the index finger. The poor fellow insisted upon my operating, so I removed the entire rectum by the perineal method, which I most often practice, but he died two years later of cancer of the liver.

May I ask what is the reason for this dereliction on the part of our noble profession? I should not say it is indolence or lack of interest for the patient's welfare; but perhaps modesty on the one hand, and failure to appreciate the real importance of making examinations in all cases where recto-colonic symptoms are complained of. I have had several cases of almost complete intestinal obstruction caused by cancer either of the rectum or sigmoid, wherein no complaint had

even been made of either serious pain, diarrhea or bleeding. Some in fact, had not consulted a physician until symptoms of obstruction had occurred. Two cases of this type required prompt colostomies for the relief of obstruction. Most people will hasten to their physician for other trouble, but will conceal their rectal diseases. Two such cases have died during the last month in my city on whom I refused to operate. Likewise two cases of cancer of the stomach under my observation are now in a dying condition, because no hope of cure can be entertained.

Methods.—My ideas as to the proeedure in cancer of the rectum do not altogether coincide with those held by some of the greatest surgeons in this field of work. I plead guilty to the charge of pessimism brought against me in New Yory City some few years ago; but my pessimism was because of the results of late operations of proctotectomy I had performed. Though feeling confident that the operation of proctotectomy could be performed fairly safely by me, these late cases were all dying in about two years of cancer of the liver, and I began to doubt the advisability of operating on late cases, because the end results of surgery had been unsatisfactory. During the last two years I have performed complete perineal proctotectomy eight times with no mortality. In one case colostomy was also performed on account of cicatricial stenosis, which caused defeetive intestinal drainage. No recurrences have definitely oecurred, though in two of the cases the cancer had ulcerated through the rectovaginal septum, necessitating excision also of part of the vagina. It was in one of these, the colostomy was done later. In the other the result was brilliant.

A letter received from this lady, for whom the entire rectum, including part of the external spincter and vagina were removed, states that she now has a normal bowel movement with no inconvenience, that she was examined by two surgeons in Denver, who stated to her that they had observed the results following proctotectomies and this was the most beautiful they had ever seen. In these two cases, as in all others, examinations were made and were reported adeno-carcinoma.

Technic.—These patients are usually toxic and depressed upon entering the hospital. Therefore, they are given from three days to a week preparatory treatment. Thorough eleansing of the intestinal tract by large and repeated doses of castor oil and enemata, and in women vaginal douches. The mouth, skin and kidneys are carefully looked after and a liquid diet given. The patient being thus thoroughly prepared is given about twenty grains of chloretone one hour before being anesthetized, is placed in an extreme Lithotomy position with the hips elevated high on a sand bag. The vagina and external genitalia, perineal region and buttocks are thoroughly swabbed with gauze swabs which have been wrung out in iodine and alcohol; then a roll of gauze one inch in diameter and about eight inches in length which has been wrung out in iodine and alcohol is inserted its entire length. The anus is now closed with strong silk cord purse string suture, iodine and alcohol reapplied to the surgical area and the instruments thus far used, laid aside.

A circular incision is now made aroumd the anus just including the mucosa if the muscle is to be conserved, or including the muscle if the cancer is situated within the lower three inches. A straight median incision is now made, if in the male, from the base of the scrotum to the anal circular incision and the perineum fearlessly opened in the front, dividing all the tissues up to the bulb and prostate and down to the gut wall. Another incision extends from the circular anal incision down to the base of the coceyx, and the posterior rectal space is opened by blunt dissection and the hand introduced posterior to the rectum, separating the rectum from the sacrum. If the sphincter is to be conserved it is now separated by dry sponge dissection from its rectal attachments on either side. The hand is reinserted posteriorly, the middle and index fingers pressed forward one on either side of the gut, and these followed by a large clamp which grips the gut firmly, and while this clamp is being held firmly and pulled downward the levator and fascial attachments are divided close to the gut.

We now make sure as to the uppermost extent of the neoplasm and at least two inches

above this, another strong broad clamp, and above this, a heavy silk or linen cord is tied firmly around the gut. The right hand is now introduced posteriorly and by fearless digital dissection, the hand hugging closely the sacrum separates and pulls the rectum down. The left hand then introduced in front of the gut and while an assistant is using traction on the clamps and ligature thus pulling the gut down, the rectum is separated from the bladder and prostate or vagina and uterus. The peritoneum is now divided by stripping it off or tearing it loose from the gut. The right hand continues to make traction upon the posterior wall of the gut until as much intestine as is desired is brought down and out. If a diseased ovary or tube is firmly adherent to the gut wall, they may either be dissected loose, or ligatures applied, and diseased structures brought down with the rectum.

It may be noted that I have not alluded to the removal of the coccyx as other operators do. It is not necessary and I never remove it. There is always ample room. I have not alluded to the control of hemorrhage. I never have hemorrhage. I thus usually remove a rectum without the necessity of using more than a half dozen hemostatic forceps. While gentle traction is being made on the gut outward and downward and the pelvic opening made as large as possible by retractors on either side the peritoneum is now closed, great care being taken not to include any nutrient vessels. In the female, though, it is not necessary, I often divide the posterior wall of the vagina as one of the first steps in this operation, and if this has been done, after closing the peritoneum, I then close the pelvic structure down to and including the levator muscle, which is also attached by loose sutures to the gut wall, and then close the vagina with chromic catgut sutures which include small niches of gut. The fascia and muscles are now closed in front of the gut with attachments to same, except a small space through which a sequestrated drain is inserted and fixed. Similar closure of the posterior structures is made with posterior drainage tube inserted and fixed. If there has been any probability of soiling, this drainage tube should extend to, or through the peritoneum. The gut is fixed to the sphincter and skin by a few interrupted sutures. The wound is now well protected while the gut is cut off one-half to one inch below the skin margin. A small drain is inserted into the intestine and held by a purse string suture. Dressings are then applied and patient returned to bed, and as soon as awake put in the Fowler position to facilitate drainage.

This operation is described somewhat in detail; because, differing from described perineal operation, it has filled the requirements in most cases.

Conclusion.—Early and careful examinations in all cases where rectal or abdominal symptoms are complained of, especially in the so-called cancer age. The two-step operation is seldom necessary. Patients complain of abdominal colostomies. The pelvis can be carefully explored and enlarged glands and other diseased structures removed. It is not necessary to remove the coccyx, which is a point of important attachments. Remarkable comfort is enjoyed and little bowel inconvenience is complained of even in those cases which require the removal of the sphincter muscle.

By noting nerve and vascular supply to the sphincter it may be shown that the sphincteric control may be at least partially re-established.

DISCUSSION.

Dr. E. E. Barlow (Dermott): Dr. Jelks has given a classical description of his method of dealing with cancer of the rectum, yet he seems to appear pessimistic as to the end result in this class of cases. Statistics show that these patients live from two to five years after operation. Surgeons all over the world have for years been giving every ounce of energy and brain they possess trying to perfect a technic whereby they might remove cancerous growths, not only from the rectum, but elsewhere in the body, thereby saving the patient's life, or at least prolonging life for a few years. If we consider the comfort these patients receive in comparison with the pain and discomfort they endure, the question is, "Is it really worth while?" Millions have been spent in research work all over the world trying to learn the cause of cancer. Much has been accomplished along this line, yet the cause is still unknown. One of the most important points that has been brought out in research work is that cancer is almost always something else before it is cancer, and if removed in the pre-cancerous stage, will prevent a cancer. Those of you who have seen the simple operation for pre-cancerous condition and then witnessed one of those mutilating operations for conditions such as Dr. Jelks has described will understand what early recognition of pre-cancerous condition means to the patient. Dr. Jelks is discussing only the condition that exists when these patients reach the specialist. Most of them are inoperable when he sees them.

The family doctor is the first man who sees and examines a cancer. Many times he sees them in the pre-cancerous stage. If he recognizes the condition and advises its removal, he has saved that patient's life, provided the patient acts on that advice. If he fails to recognize it at this time, the patient is the loser. Sometimes the patient does not seek medical advice until it is too late. In that event, it is the patient's fault.

It seems to me that the one great factor in the prevention and cure of cancer is the education of, first, the laity to seek medical advice for any abnormal growth, no matter how trivial it may seem to them; and, second, to educate the profession to recognize pre-cancerous conditions and advise their early removal when the laity apply to them for advice.

I believe that if half the amount that has been spent searching for the cause of cancer could be spent for an educational campaign to be carried direct to the profession and laity that we would soon have this dreaded disease under control and the condition that Dr. Jelks has so ably discussed here today would, in a few years, at least, cease to exist.

Dr. M. D. Ogden (Little Rock): There is one point in Dr. Jelks' paper, following the line of Dr. Barlow's discussion, that perhaps might be expanded a little bit. They both mentioned that these cases are not examined. I think that a lot of us are perhaps intimidated by the idea of a proctoscopic examination. It is one of the easiest examinations that can be made, and requires practically no facilities. He mentions the Kelley proctoscope or sigmoidoscope, one of the most useful office instruments that we have. It is simply a straight tube, plugged at one end, and has a handle to it; no electric lights. The only apparatus required for a complete sigmoid examination is one of these proctoscopes and a head mirror, which we all have. The patient is placed in the knee-chest position, either on the floor or on a table. It requires no special table for it. A kitchen table does just as well. The knee-chest position gives us our dilation of the rectum and sigmoid when we get up in it. And, the view that one obtains through the sigmoidoscope gives an adequate inspection of the whole rectum, and also the sigmoid. It is easy, it is simple, it requires no special training and no special instruction. I am sure that we do not use it enough. Proctologists, like all specialists, become enthusiastic about making rectal examinations for any complaint with which the patient comes to us, and we learn something from them. We don't go to the extent that they do and make a proctoscopic examination in all cases of headache or recurrent sore throat; but we can learn enough from them to go ahead and make this easy, simple and quick examination, and it will keep us from overlooking these pre-cancerous conditions, these syphilitic strictures of the rectum, these cancers of the rectum, and will cut down the percentage of those cases which reach the surgeon too late for any operable relief. (Applause.)

Dr. Dewell Gann, Jr. (Little Rock): I am intensely interested in the cancer problem, and am very glad to have heard this splendid paper of Dr. Jelks. It seems to me that the trend of all papers and discussions this morning has been toward the early recognition of diseases; not only of cancer, but other conditions, which are very often, because of being chronic sources of irritation, pre-cancerous conditions. It is an astounding fact that there are 90,000 people dying every year in the United States from malignant diseases, and it is increasing at the rate of two and a half per cent per annum. In 1919, there were 324 recorded cancer deaths in the State of Arkansas. In 1920, there were 381 recorded cancer deaths in Arkansas, an increase of 17.6 per cent, of 15.1 per cent above the national average. The people should be instructed along the lines of early recognition and proper treatment.

The facts about cancer are well known to the profession, but I have today some three or four cases of uterine malignancy in hospitals that have been under the observation of physicians for from six months to a year, and I have one case in mind that was under the observation of three physicians for one year without an examination. That shows a dreadful state of affairs. It seems to me that we could take a little more time with these conditions and give them a little more consideration. Certainly the textbook descriptions of cancer are obsolete, and should be discarded. If we wait until the patient knows that he has cancer, and the neighbors know it and everybody in town knows it, the case is incurable, regardless of what facilities you have to deal with it. Cancer of the rectum, of all conditions, is one that should be recognized in its early stages. It is the least amenable of all malignancies to our usual methods of treatment. If they are recognized early and radically removed, they are curable. If they reach the inoperable stage, we are at a loss and have nothing that will benefit them. (Applause.)

Dr. J. S. Stell (Hot Springs): There is one point that Dr. Gann and Dr. Ogden mentioned, upon which I think so little stress is laid, and that is in regard to examinations. You will find many cases of females who have been to doctors repeatedly, without any examination having been made. Or, they go through a process of examination with a great deal of timidity. I consider when a lady comes in for an examination, she wants an examination, and I make her feel that it is more or less of a compliment to be examined. Recently, I had a lady of 57 years, come into the office, who had had fourteen physicians in the last two years, and, she had never had a pelvic examination. Largely the lack of recognition of cancer early enough is due to lack of examination by the doctors. They just go through a superficial or cursory observation, without ever examining the pelvis, where cancer is more prevalent in the female. I think each and every one of us should take it upon himself to make an examination of women with just as little concern, as far as the timidity and delicacy of the situation is concerned, as we would with a male. If we would do this, cancer would be recognized in 95 per cent of the females when it was in that stage where it could be treated and something done for it in the way of relief. The question of an examination by each and every doctor of every female is the point I want to stress. The question of the operation and the question of the treatment of it, I think, should bear right on a thorough examination. (Applause.)

Dr. R. H. T. Mann (Texarkana): Dr. Jelks was kind enough to discuss my paper on diseases of the maxillary sinuses yesterday, of which in his opening remarks, he claimed to know nothing, and I am going to say as much about diseases of the rectum. I am talking about a subject in special locality of which I know nothing. I am going to ask Dr. Jelks, when he closes, to state to us the number of cures or the percentage of cures which he has had from operative procedures in recognized cancers of the rectum. That is, if Dr. Jelks did 100 operations for cancer of the rectum in all stages, I am going to ask him if he has any statistics at hand from which he could give us a statement of the mortality within three, four, or five years.

Now, that brings up the whole cancer question, and that is that we all should recognize that operation should be done early, either before the cancer is recognized or before it is a cancer. In the beginning is the time to do it.

The point which I want to emphasize, in operations for cancer, especially the border-line cases, is that a cancer, so to speak, is an infection in that special part of the body where it is located; in other words, you do an operation for cancer, for the removal of the cancer, probably a broken down cancer. Have you thought how hard it is to disinfect that area so that, when your operation is completed, you may have left infected cells throughout the entire extent in which this incision has been made, and, consequently, you have a very rapid spread of the disease which nature, before that time, had made an effort to exclude, and probably was succeeding to some extent in walling off. Now, those are the advanced cases of which I am speaking. Some means must be at hand, then, other than the knife in these advanced cases to prevent the spread of that cancer. Very fortunately or very happily, we remove cancer with the electric cautery, or something of that kind, so that you do, to a certain extent, prevent the spread of the disease itself. Now, gentlemen, again saying that this is a subject of which I know absolutely nothing, I am going to leave these few remarks with you. (Applause.)

Dr. H. Thibault (Scotts): I want to emphasize what the essayist and what Dr. Gann and Dr. Ogden have said, about the necessity of examination in suspected cancers of the rectum. When a patient comes into a physician's office, the physician ought to go over him from head to foot. All of the hardships that the profession has suffered at the hands of popular writers and at the hands of irregular practitioners are well deserved, and they are deserved for that one simple reason that 90 per cent of the physicians up to the present time have neglected a careful, routine examination of everything in those patients, whether or not that examination seems to be necessary. Until the rank and file of the profession have formed that professional habit of a careful, routine examination, we will deserve all the slurs that come from the chiropractics, from the faith healers and from the popular writers, that take a pop every once in a while at the medical profession.

Now, in regard to Dr. Gann's statistics, it does ruffle our feelings sometimes when we have pumped into our heads the necessity for being on the watch for a thing, and then have the men that are specialists in that line to jump on us as soon as we increase the popularity of the disease or increase the statistics in regard thereto. If the ability to diagnose cancer increases in the medical profession, the incidence of reported cases is bound to increase proportionately. Dr. Gann ought not to feel a bit discouraged because there were more cancers reported last year, or the last two years than there were three or four years ago. If all of them are diagnosed, there will be three or four times more cases reported in the coming years than there were last year.

Yesterday Dr. Mann read a paper in frontal sinus disease, and Dr. Jelks criticised him very severely for discontinuing his treatment before he had taken out the appendix and drained the gall bladder. I think that Dr. Mann ought to have emphasized the fact that no case of rectal cancer is properly cured until both frontal sinuses are drained. (Laughter and applause.)

Dr. D. C. Walt (Little Rock): I want to thank Dr. Jelks for his most excellent paper. As a clinician I can not see how a man can be well and have a cancer. I can not see how removing a local expression would remove the general condition that made it possible to exist. The same is true of appendicitis, gastric ulcer, and other symptoms. Then, there must be something else to do besides operate on patients suffering with these various manifestations, before, as well as after operations.

Every patient should receive a complete examination physically and, when necessary, the laboratory and specialist should be used and a part of this examination should be repeated each time the patient is prescribed for. Through this process I have been convinced that there is not a normal or practically normal body in the world (from the point that it might be). Each cell as well as each organ shares this abnormality.

We should teach the patient, and the laymen in general, that they are not well, that they might make a constant effort to be better than they would be if they didn't try. A cancerous age is recognized, but that can only depend upon conditions as well as time.

The doctor has not been educated to think in these terms as much as he should. I was talking to Doctor Pierce, who was in control of Camp Pike Zone during the war. I asked him how often he had drainage; he asked me what I meant. I asked him how often his bowels moved; he said once or twice a day. I told him that was horrible; he said if they acted any more he would think he had diarrhea. I asked him what he ate. He said anything that didn't disturb his stomach. I was talking to the priest who came to Little Rock some time ago with a bunch of doctors from Baltimore, New York and Chicago, to encourage the physicians to standardize the hospitals and teach the laymen to go to hospital for early diagnosis and operations. I made the remark that there was not a well man in the world, and he reared himself back with the assurance that he knew and said that he was perfectly well. I said: "What do you eat?" He said: "Anything; nothing disturbs my stomach." I asked him how often his bowels acted. He said: "Every day, sir." I remarked: "Is it possible for a man to live sixty odd years as if he had a special dispensation, live from the point of appetite more than reason, drain from the point of necessity more than requirement, eat because it tastes good, eat because he wanted it, eat to please his neighbors and cook, possibly eat to keep it from spoiling, make a slop barrel of himself, drain like a sausage mill, harnessed in clothes, polite in society, wedded to his business and an animal, and be well?" He threw up both his hands and left me as if in holy horror. This Father was an educator, knew as much about laboratory work as the best of doctors. This man also is Dean of 60 per cent of the hospitals in Canada and America.

Dr. S. W. Colquitt (Grady): This discussion has been very interesting, but there was one point that was brought out or rather touched upon by one of the speakers a few moments ago that adds a climax. It is the fact that we are getting more and more information from the rural districts in our practice. If we just stop and think for a moment, the majority of the population of our State is in the rural districts, and necessarily the majority of the cases that would come up to the doctor from time to time will come from the same districts. For that reason I think that reports are coming better from the country districts and from the smaller towns than has been known in times past, and that is why Dr. Gann has been finding the statistics that he has pertaining to the increase in the number of cancers being treated in the last few years. I have found by experience and association that there is too little attention paid by the doctor in the smaller towns and in the country districts to these reports. He doesn't keep a record of these things. I think it is a responsibility upon every doctor who is in the practice of medicine to keep a daily record of everything that he does. It not only helps him, but it is the honest thing for the patient.

Another thing that has added to it is the fact that there is a good deal more association between the specialist and the general practitioner. They are more willing to report a good many of these cases,

and more willing to send them where they should be sent. Another thing is that the lack of records keeps the reports from getting as high as they really should.

Another thing, when you find these cases and refer them to the proper place for treatment, a matter of finance arises, and the patient forgets us, and we don't hear more of him very likely. I want to specially bring out the point that there are not enough records made by the doctors in the smaller towns and in the country districts to enable us to keep up with these things properly.

Dr. Jelks, in response: I apprcciate the discussion that my paper has brought out. I believe, gentlemen, that the purpose of this paper has been fulfilled in so far as those arc concerned. But, what are we going to do with the other fellows? One of these patients that I don't believe I have cured by the operation upon her was refused a rectal examination by three different men, and good men, one right after another. One, finally, whom you all know, I believe, Dr. Frank Jones, was phoned to by her, because she knew him as a close friend, and he said, "Don't come to me, but go to Jelks now and be examined." But, gentlemen, will you explain to me if you can, or explain to yourselves, if you can, why it is that, when some patient would come to you with any complaint in the abdomen or in the pelvis, you would refuse the introduction of a digit covered with a rubber tube, whereby you can make a more comprehensive examination of any structure within the pelvis, than by any other known means whatsoever.

Now, when the doctor asks me the question very pointedly, and very apropos, too, "What is your percentage of cures?" I will ask the doctor what percentage of his cases of cancer, say, of the eye, such as he reported yesterday are cures? I am going to say to you that I don't believe I have cured 25 per cent of the cases wherein I performed complete proctotectomies, nay, 10 per cent; would be nearer the fact, and that's why I was dubbed the pessimist in New York. I have some living, it is true; in fact, all of the eight I am here reporting are still living, but they have not lived out what I believe to be the limit; not two years, but five years. As I said in the paper, most of my cases have died within two years of carcinoma of the liver. While I don't know it, and therefore, I said I didn't know it, but I believe that a case in El Paso, Texas and another one in Mississippi will have recurrences. Two among that number of eight that I reported here of perineal proctotectomies had recurrent manifestations within the liver and the pelvis but not in the gut. Not recurrences, if you please, the cancer is still in the pelvis; but is not in the healthy gut that I brought down.

Now, then, Dr. Walt has spoken in a peculiar manner, I think. But, I want to say that what I am pleading for, is the removal of the smaller expressions of disease before they become the major expressions, those of cancer, well developed, well defined, easy to diagnose, wherein, all hope may be abandoned is so far as a permanent cure is concerned. I thank you gentlemen. (Applause).

Dr. Mann: I make a motion that we thank Dr. Jelks for his paper and for the frank expression of his mortality, voice our appreciation of his visit and how much we have enjoyed his being over here.

Seconded. Carried.

The so-called deficiency dseases of which rickets is the most common example is due in part to a calcium deficiency. Either the diet is low in calcium or the calcium of the food is not absorbed.

IN CANCER OF THE NECK OF THE UTERUS, SHOULD CAUTERY, RADIUM AND X-RAY PRECEDE OR FOLLOW THE RADICAL OPERATIVE EXCISION?

By R. C. Dorr, M. D., F. A. C. S.,
Batesville.

My object in writing this paper is to get the opinion of those who have had experience in various ways of treating this kind of cases. My experience with radium is practically nothing. Especially, I want to get the opinion of those who have had experience in radium. Of course we all know the surgeon's viewpoint; that is, radical excision. Under the head of inoperable cases, one of our leading surgeons, lays down the rules for cautery treatment which are as follows: (Warbasse Surgery).

1. Cancer of the cervix, not so far advanced but that its boundaries are within surgical reach, is best treated by cauterizing the growth until its limits are apparently reached. This operation should then be followed by radical abdominal hysterectomy, and removal of pelvic connective tissue if the patient is in good condition.

2. If the general condition of the patient is not good, but the growth is not far advanced, cauterization followed by vaginal hysterectomy should be done instead of the abdominal operation.

3. If the general condition of the patient is decidedly bad, militating even against vaginal hysterectomy, the cautery operation alone should be done.

4. If the disease is advanced beyond the possibilities of eradication with the knife, and the patient is in good general condition, the cautery operation through the vagina should be done, the uterus cauterized down to a shell, and the operation completed as an abdominal hysterectomy two weeks later.

5. If the disease is far advanced, but the condition of the patient poor, the cautery operation should be done, and the question of later hysterectomy deferred.

6. Cancer of the body of the uterus is best treated by abdominal hysterectomy. If the condition of the patient is so bad that abdom-

inal operation is contraindicated, vaginal hysterectomy may be done. In these latter cases the vaginal hysterectomy may be done with clamps and the cautery, thus saving blood and time.

7. Cases which belong to the category of the surgically hopeless may have much done for them by the cautery, followed by x-ray or radium.

I will briefly report two cases which illustrate both kinds of treatment.

First case. Mrs. J., 38 years old, married, but never pregnant, came to me with a hemorrhage of two months duration. I examined her and diagnosed cancer of the neck of the uterus perfectly movable. I did a radical operative excision on October 23, 1919. She made a rapid recovery. Nine months afterward it returned, I then took her to Chicago and had her treated with radium and x-ray which healed everything and she is well at the present time.

Second case. Mrs. C., 38 years old, married; had one child, came to me in September, 1918, with a hemorrhage that had been going on for twelve months. Uterus was fixed and I diagnosed cancer of the uterus too far advanced for radical excision. On September 5 I cauterized this case, destroying the whole neck. The hemorrhage was stopped and she built up. In about twelve weeks she went to Kansas City and was treated with radium. This patient lived two years and five months. In both of these cases, specimens had been examined by pathologists and pronounced carcinoma.

I have come to the conclusion that cancer of the neck of the uterus should first be treated by cautery, x-ray and radium, as Dr. Byrne did it; so far as I know no one has ever improved on his method. If this does not cure, then radical operation should be done if the remainder of the uterus is movable.

I believe that the cautery, x-ray and radium will prolong and save more lives than the radical operative procedure. In other words, I believe the conservative treatment should have the right of way as it practically has no death rate.

Therefore, if cautery, x-ray and radium will do so much for the *inoperable* cases, why should it not have the right of way in the *operable* cases?

DISCUSSION.

Dr. Dewell Gann, Jr. (Little Rock): I presume I should say something along this line, since I have been interested in the treatment of malignant disease for some time. In 1913, while with Dr. Kelly in Baltimore, I saw a few operable carcinomata of the cervix treated with radium. At the time, the cases were treated with radium, because of some general contraindication to operation. Since then I have had the opportunity of watching a few of those cases and so far as I know, none of them have died. Before recommending a technic for the treatment of malignant disease of the cervix, we should classify our cases, first, into operable; second, into borderline; and third, into inoperable. Recently I saw an article in the Journal of the American Medical Association by one of Cincinnati's leading radiologists, in which he advocates the use of radium in the treatment of carcinomata of the cervix to the exclusion of operation. We are seeing these papers constantly now, but, there is still some question in the minds of some of the leading surgeons as to whether or not we should treat these cases with radium if there is no general contraindication to operation.

In answer to some of Dr. Dorr's questions, I think they should all be rayed with radium prior to operation, because, after the uterus is removed, the vaginal vault is converted into a dome, and it is not possible to ray the broad ligament. The operation should follow the raying of the mass before tissue changes take place from the application of the radium. The border-line cases should all be treated with radium. It is very difficult, regardless of how radical a procedure you may carry out, to cure a border-line carcinoma of the cervix by operation. All inoperable carcinomata of the cervix should have the advantages offered by ray-therapy. I think that all uterine malignancies, whether they involve the cervix of the fundus of the uterus, should be rayed with radium through the vaginal approach, and by deep Coolidge tube radiation through the abdominal wall. You can very often eradicate the local condition, and in a short time your patient will die from abdominal metastasis.

The cautery should not be used in the treatment of malignant disease of the uterus any more, I think, than paste should be used in the treatment of malignancies of the skin. (Applause.)

Dr. M. D. Ogden (Little Rock): If I am not mistaken, or if I understood it correctly, I understood Dr. Dorr to state that he used vaginal hysterectomy in some of these cases. Was that correct, doctor?

Dr. Dorr: I have given the rules as laid down in a leading work on surgery; that is in Warbasse's Surgery. It speaks for itself.

Dr. Ogden: I consider that the indications for vaginal hysterectomy under any conditions are very, very few. It is permissible in prolapse of the uterus with a cystocele, where you wish to bring the broad ligament underneath the bladder to hold it up; but I cannot conceive of any malignant condition of the uterus or any inflammatory condition of the uterus where vaginal hysterectomy would be justified. I think the use of it is indefensible as compared with abdominal hysterectomy. In cancer of the cervix, in any abdominal hysterectomy, anything short of a radical Wertheim operation does more harm than good. I have seen on more than one occasion a subtotal hysterectomy done for carcinoma of the cervix, and perhaps some of you have seen the same thing, and the patient is many times better off, even, if it is

an early carcinoma, entirely operable, if they will submit to the use of the radium or to the x-ray.

The Wertheim operation is, to my mind, one of the biggest operations in surgery, one of the most difficult to perform, and the mortality is enormous, even in the best hands; but, even with that, if hysterectomy is attempted in carcinomata of the cervix, it should be a Wertheim. If a Wertheim cannot be done, they should not be touched, but should be given the benefit of the radium and the x-ray.

Dr. Dorr, in response: Regarding the first speaker, that he couldn't use radium on the broad ligament. All you have to do is to take a little cautery and make a little opening up there at the end of the vagina, and in six days insert your radium in the opening. I have seen that done. Cancer cells are of very low vitality, and they succumb to heat. Heat will go farther than you will get with your knife; much farther. So, I am in favor of the heat.

You talk about a radical excision. I had a case operated last August, where the whole rectum was removed clear up to the sigmoid. I think it would have been better if this had been treated some other way. Still, we don't know. Here it is:

"I found a large malignant mass involving the perineal region, and felt it best to make an inguinal colostomy and then destroy the growth below by cautery. I first made an inguinal colostomy, and then excised the mass in the perineum with the electric cautery, and then further cauterized the entire area with hot irons. We are giving him intensive x-ray treatment over the perineal region, and hope that we may delay a recurrence for a long time. I am sure that he is going to be much more comfortable with the inguinal colostomy than with the bowel below as it was before."

In the return of cancer of the breast after excision, they are using the cautery, then x-ray, then closing the raw surface with skingraft.

I think in operating on cancer of the neck of the uterus, you should use cautery, x-ray and radium. And if, in your judgment, it should be done, the operation can be used afterward.

Some authors claim 75 per cent cures of cancer of the body of the uterus by excision. If this is true, they should be operated first, of course. I don't believe it is true.

Among many interesting things in relation to the medical profession and the public, Dr. William J. Mayo, in an address delivered at the opening of the Cleveland Clinic, said:

"Osteopathy appears to be a combination of mental suggestion and certain definitely valuable mechanical practices. Anterior poliomyelitis once was called 'the Scandinavian disease' because of its ravages in the Scandinavian countries. In Sweden massage was highly developed, and for years trained masseurs have been doing much for certain types of physical disabilities. The war has taught the medical profession the great value of active and passive movements and shown how much can be accomplished thereby in suitable cases of disorders of the muscles, bones and joints; and such treatment is now a recognized medical asset. Osteopathy, with all its absurdities, therefore, has had a certain degree of usefulness in this field, until recently neglected by the medical profession, but it has depended largely on suggestion for its effect. This cult has tried to improve its educational basis, but it is doomed. To tell a man that his ribs or knees or other visible parts of his anatomy are dislocated may be credited for a time; but if he compares these parts of his anatomy with those of members of his family, or perhaps joins a Y. M. C. A. physical training class where he may see other men's ribs and knees, he loses faith, because the absurdity is evident. Poor osteopathy! Chiropractic has stepped in and taken the spine out of osteopathy. Every man knows that he has a spine, but it is behind him, he cannot see it, and therefore he cannot get those enlightening comparisons open to most patients of osteopathy. Chiropractic simplifies the whole theory and practice of osteopathy. The barber, the unpaid minister and the teacher, and the clerk quickly acquire the jargon in chiropractic schools for a price. Chiropractic does less good perhaps than osteopathy, but has a better alibi, with a shrewder conception of the possibilities of concealment of the absurd.

"Can we wonder that the public at large fails to appreciate the essential differences between what we speak of as function nervous diseases and their mimicry of the physical, when we as a profession have so little knowledge concerning these matters? In these cults is represented treatment without knowledge, in response to the desire of the people for a remedy for existing ills, real or imaginary. The 'patent medicine' business is based on the same desire for a remedy and faith in a suggested cure. The public is satisfied with each new cult until its failure becomes known. Hope springs eternal in the human breast, and quack remedies and cults with new names take the place of the old."

It goes without saying that the members of the profession in every community should affiliate with some medical organization, beginning with their local society by all means. However there are men in every community who appear to be indifferent to the good that is to be obtained by actively identifying themselves with their local medical society.

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All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

RICH PRIZE FOR CANCER REMEDY.

Announcement has been made in the lay press of the offer of a $100,000.00 prize for the scientist who discovers a proven cure or preventative of cancer. There has been some comment in the lay press—and mostly of the wrong kind of comment—being based on the richness of the prize, one taking the position that the discoverer of a cure for cancer would be enriched to a far greater extent than a paltry $100,000.00.

Such comment is hereby called the wrong kind because not since medical science was in its infancy, has hope of financial reward been a stimulus to discovery of either remedies or preventive measures concerning any disease. The practice of medicine is on a much higher plane than the acquisition of sudden wealth. Its keynote has always been service to humanity. Does any one suppose that the martyrs to science, the men who have risked their lives, who gave their lives even (as in the experiments tracing the transmission of yellow fever, for example), were influenced by the hope of cash reward. It has been said that virtue is its own reward. Just as truly any discovery in medicine which has been of benefit to humanity has rewarded the scientist only by the knowledge and the pride of accomplishment. The scientist, the adventurer and the explorer, are never stimulated to the pursuit of their work in any field by the hope of gain. They pursue their natural, God-given bent. They have even suffered martyrdom for the truth when opposed by prejudice and dogma. For the truths of astronomy, scientific men have forfeited life and liberty. The explorer suffers the rigors of the Arctic region or the perils of tropical jungles, gives his life for the cause, but never for gain.

Likewise, the medical scientist pursues his experiments inspired by a desire to conquer the invisible empire of deadly germs for the benefit of all humanity—not for the paltry gain of dollars. This is the point which the lay editor too often misses. Whether a million dollars, or a hundred thousand dollars or a dollar and a half—or not a cent—await the scientist, his efforts would alike by exactly as devoted. Thank God, the scientist is never a mere mercenary!

SOUTHERN MEDICAL ASSOCIATION.

Every member of the Arkansas Medical Society is, or should be, as vitally interested in making the coming meeting of the Southern Medical Association at Hot Springs a success as in the annual meetings of the Arkansas Society.

And why?

The Southern Association as a body comes as the guest of the Arkansas Medical Society; because, by official action, the Arkansas Society at the May meeting, joined with the Hot Springs physicians in extending the invitation to the Southern Association to hold its meeting at the Spa, November 14-17. Thus the Arkansas Medical Society becomes host to the Southern Association and it would indeed be ill-mannered should the host be lax in entertaining the guests.

Besides outside of any question of courtesy the program itself should attract every physician who can possibly attend. It is not necessary to give the program in detail, but there are some two hundred papers to be read and discussed, and it is almost needless to add, that, prepared wholly by practitioners of the South, the papers will be of special interest to the physicians of the South, as diseases of the South particularly will be stressed; and they will be prepared by some of the most notable physicians of this section of the country. The indications point to a record-breaking attendance, even to the extent of special trains starting from Atlanta and picking up groups of delegates at all important points en route. But the Arkansas physicians must do their part as a duty and pleasure, as well as for their own advancement; for, as frequently has been pointed out, no convention of physicians ever has been held but that it could teach those who attend something of value.

The Hot Sprngs physicians are working with wonderful enthusiasm, but complete success can be attained only by the co-operation of the physicians of the whole State. It is due our visitors to give them a hearty welcome and a big attendance. It is part of the duty of every member of the Arkansas Medical Society to make good the pledges of the society officially made. There will be a splendid entertainment program and the ladies who accompany the delegates will be especially looked after. From every angle the coming meeting offers every inducement for the physicians of the State to attend and they will be derelict in their duty to the State society and forfeit a pleasurable and profitable occasion if they fail to be there.

Abstracts.

VALUE OF DRUGS IN INTERNAL MEDICINE.

That we are now witnessing a cautious revival of the use of drugs in the treatment of disease is the opinion of Lewellys F. Barker, Baltimore (*Journal A. M. A.*, October 8, 1921). In the therapy of today, based on more accurate diagnosis and on enlarged conceptions of pathologic physiology, etiology and pathogenesis, a new helpfulness prevails. Available drugs are of real value in curing, in ameliorating and in preventing disease, and new drugs that are useful are steadily being discovered. Adequately to make use of the pharmacotherapeutic means at his disposal for meeting etiologic functional indications, the internist must be well trained in normal and pathologic physiology and should have become acquainted with the known facts of etiology and pathogenesis. He should have learned in the pharmacologic laboratory the effects of the more important drugs on the normal animal body; and he should have had opportunity in the hospital wards, and in the laboratory of experimental pathology and therapy, to observe the changes that can be produced by drugs in disease. Very few have as yet had opportunity for the latter; but the medical schools should provide for it in the future. Teaching hospitals at present are, perhaps, more diagnostic institutes than institutes of therapy. It might, possibly, be wise to divide medical clinics into two parts, patients entering one division for general diagnostic study and emergency measures, to be transferred afterward to the other division for full treatment, the effects of which could be carefully studied by the students.

The introduction of new therapeutic methods and new drugs can scarcely be expected from now on to be arrived at by accident, or through pure empiricism. Every new therapeutic agent should be thoroughly tested in the laboratories as regards its activity and its dangers and, later, in the organized clinics, before it is introduced into general medical practice. But results in clinical experience must ever remain the final and crucial test of every form of therapy.

VALUE OF DRUGS IN SURGERY.

For the maintenance of its essential difference in potential, the cell depends on (a) an abundance of fresh water; (b) oxygen; (c) rhythmic alternations of periods of rest and sleep. These fundamental requirements are the final guide to the surgeon in his selection of conserving and remedial agents. To insure an adequate supply of fresh water and of oxygen to the cells, as may be required in the individual case, George W. Crile, Cleveland (*Journal A. M. A.*, October 8, 1921) utilizes the transfusion of blood and the subcutaneous injection of water, both of which are given through the organism with increased force and certainty as the result of digitalizing the myocardium. Excessive activation by fear, worry or anxiety, with the resultant concentration of acids in the cells, is controlled by management, aided, when necessary, by bromids or by morphin; by using the readily taken, comparatively innocuous anesthetic, nitrous oxid-oxygen; by administering the anesthetic in the patient's room and taking him to the operating room under anesthesia, and in selected cases, by the preoperative administration of morphin and scopolamin for the purpose of maintaining an even metabolism, that is, an undisturbed internal respiration. Excessive stimulation of the nerve cells by the trauma of the operation is controlled by local, regional, or spinal anesthesia with procain—the safest local anesthetic for general use. Postoperative activation is controlled by the application of heat, by morphin, by blocking the traumatized area with quinin and urea hydrochlorid. Atropin is used to prevent mucus, especially in operations on the respiratory tract. For the control of excessive metabolism as in postoperative hyperthyroidism, refrigeration, by literally packing the patient in ice, is specific. Bromids and morphin lessen the drive, and aid in securing the state of negativity essential for restoring the difference in potential in the cells. In certain cases in which morphin acts as a stimulant rather than a narcotic, large doses of bromid given by rectum will quiet the patient. Thyroid extract and thyroxin are used to supply the physiologic need in cases of thyroid deficiency; calcium lactate and parathyroid extract in cases of parathyroid deficiency. Alcohol and strychnine are rarely used. The former is of value in certain apathetic infections, especially in the aged or in those who have been accustomed to it. In general, with the exception of the employment of digitalis to stimulate a weak myocardium, the use of stimulants is scarcely worth while and may be harmful. The use of a solution of sodium bicarbonate as an agent for combating shock is of little, if any, more value than water. In both war and civilian practice, it has been found than solutions of gum acacia not only have no value but probably have caused a number of deaths. Glucose solutions are of little value.

USE OF DRUGS IN INFANCY AND CHILDHOOD.

In order to establish a standardized list of drugs essential to the treatment of diseases of infancy and childhood, Henry F. Helmholz, Rochester, Minn. *Journal A. M. A.*, October 8, 1921), selected from the pharmacopeia a list of sixty-one drugs. This list he sent out to eighty-four men who are limiting their practice to pediatrics, with the request that they check the drugs listed and add to them any drugs which they considered essential in their practice. Of the eighty-four men, sixty-four responded. Only mercury in some form and santonin, on the list submitted, are used by all sixty-four men. Besides these, silver, arsenic, iron, sodium bicarbonate, cod liver oil, and at least one representative of the opium series, the antispasmodics, heart and circulatory stimulants, hypnotics, laxatives, antipyretics, anthelmintics, and urinary antiseptics, were used by sixty men of the sixty-four. One-half of the men used forty-three of the drugs indicated on the list. Fourteen added milk of magnesia, and three or more added benzyl benzoate, hyoseyamin chloroform, agar-agar, creosote, chenopodium, glycerin, and tincture benzoin compound. One man added thirty-eight drugs to the list. The drugs in this list can readily be divided into four groups. The drugs in the first group have specific indications; for example, mercury, arsenic, quinin, santonin, male fern, and so forth, act directly in destroying parasites, and the drugs such as silver, hexamytholenamin and the salicylates, have definite antiseptic powers for destroying bacteria. The indication for the use of these drugs is usually

given with the diagnosis of the disease. The drugs in the second group regulate the function of the different organs; for example, digitalis, the group of laxatives, and the diuretics. The third group is essentially for the symptomatic treatment of disease, as morphin for the relief of pain. The fourth group consists of drugs that are used for a specific purpose, and for practically no other, such as phosphorus in the treatment of rickets and spasmophilia, mustard for counterirritation, and phenol (carbolic acid) for the infections of the middle ear. The treatment by drugs of diseases in infancy is influenced by its effectiveness by the factor of nutrition and growth. This is perhaps best expressed by the statement that as long as a child eats and digests well there is a good chance for recovery. A drug which acts favorably on the disease focus but interferes with the nutrition of the child, is harmful. The effect of the so-called tonic treatment during the active stage of disease is another example of the failure to recognize the nutritional factor in disease.

Personals and News Items.

Dr. W. R. Owens of Paragould has moved to Glendale, California.

Dr. A. A. McKelvey has moved from Fort Smith to Washington, D. C.

Dr. T. E. Hodges has moved from Garfield to Rogers.

Dr. A. C. Belcher has moved from Fort Smith to South Richmond, Va.

Dr. R. F. Parks has moved from Midland to Fort Smith.

Dr. and Mrs. F. Walter Carruthers of Little Rock have returned after an extended stay in Chicago.

Dr. and Mrs. Loyd Thompson of Hot Springs have returned from their vacation trip in the North and East.

Dr. Robert Caldwell, of Little Rock, is attending the clinics in Philadelphia and New York.

Dr. C. S. Pettus announces to the profession the opening of the Pettus Surgical Infirmary, 112 West Ninth Street, Little Rock.

Mrs. S. J. Hesterly of Prescott entertained the physicians of Prescott at a dinner in honor of Dr. Hesterly's birthday September 20, 1921.

Dr. Dewell Gann, Jr., Little Rock, will be out of the city October 22 to October 30, on account of the meeting of the F.A.C.S. at Philadelphia.

Physicians visiting in Little Rock during the past month include: C. D. Milner of Milner; T. W. Hardison of Morrilton; S. J. Hesterly of Prescott; George S. Brown of Conway; L. Gardner of Russellville.

There will be a Venereal Disease Institute and general health conference in connection with the meeting of county and local health officers in Hot Springs, November 10, 11, and 12.

The United States Public Health Service contemplates the establishment of a trachoma hospital at Russellville. The hospital will be operated as a Federal institution and both hospital and dispensary service will be free.

WANTED—We will appreciate one or more copies of the June, 1919, and November, 1920, Journal of the Arkansas Medical Society. Send to 810 Boyle Building, Little Rock, Arkansas.

The Pulaski County Medical Society held its first meeting of the fall session at the State Hospital for Nervous Diseases as the guest of Dr. C. C. Kirk, October 3, 1921.

Following a full course dinner the scientific session was held in the assembly hall.

In the absence of President Caldwell, Dr. J. B. Dooley presided. One hundred physicians were in attendance.

Dr. Kirk's address was on "Medical Organization and Administrative Problems."

Clinical cases were demonstrated by members of the staff, and an interesting and instructive discussion elicited.

The Tri-State Medical Society will hold its annual meeting in Shreveport, La., December 7, 8, 1921.

We hope to repeat our successful meetings, having secured excellent papers from some of the foremost physicians of this country. Should you be interested in any of the following subjects, send your name with title of your paper to the proper section chief. We hope to have our program issued early in November, so please send in your subject early. The following are Section Chiefs: Medicine, Dr. Thomas P. Floyd, Shreveport; Gynecology, Dr. E. L. Beck, Texarkana; Surgery, Dr. Joe Becton, Greenville, Texas; Eye, Ear, Nose and Throat, Dr. R. H. T. Mann, Texarkana; Urology, Dr. S. Y. Alexander, Shreveport; Miscellaneous Topics (Pathology, Dermatology, Anesthesia, X-Ray), Dr. Wm. R. Bathurst, Little Rock.

RED CROSS WORK CONTINUES.

The American Red Cross, through its annual Roll Call, to be held November 11-24, is asking the support of the American people for its public health work, which includes the establishment of health centers, the appointment of public health nurses, the maintenance of disaster relief preparedness, instruction in First Aid, Life-Saving, Food Selection and Home Hygiene and Care of the Sick, and assistance to the disabled soldiers, a thousand or more of whom are still reporting every month for treatment. The Red Cross spent last year for the disabled soldiers alone $10,000,000.00, and this is $4,000,000.00 more than the aggregate receipts from membership dues. If the work is to be continued and maintained at its previous high standard of excellence, the membership must be greatly increased this year.

Certain facts about cancer well known to the profession should be known by the laity. The physicians in every county are responsible for the health and welfare of their people. What are you going to do to help out during the National Cancer Week now being planned by the American Society for the Control of Cancer? The plans of getting the hopeful message of Cancer Control over to the people have been mailed to the Secretary of your medical society. Ask him about them. Volunteer your services. Help get together and remember you are the unit. The State Cancer Control Committee cannot properly function without you. One out of every ten individuals over the age of forty dies annually from cancer.

Insidious in its onset;
Painless in its incipiency;
Local in its early stages when
Curable if properly treated.

STANDARD QUININE TREATMENT.

The Standard Quinine Treatment recommended by the National Malaria Committee and approved by the United States Public Health Service is a most effective and practical method of treatment for this purpose. It is as follows:

"For the acute attack, 10 grains of quinine sulphate by mouth three times a day for a period of at least three or four days, to be followed by 10 grains every night before retiring for a period of eight weeks. For infected persons not having acute symptoms at the time, only the eight weeks' treatment is required.

"The proportionate doses for children are: Under 1 year, one-half grain; 1 year, 1 grain; 2 years 2 grains; 3 and 4 years, 3 grains; 5, 6 and 7 years, 4 grains; 8, 9, and 10 years, 6 grains; 11, 12, 13, and 14 years, 8 grains; 15 years or older, 10 grains.

"This Standard Quinine Treatment for Malaria should be taken only upon the advice of a physician and under his direction.

"It is in the cure of the infection so as to prevent the person from remaining a carrier, a potential source of infection to others and likely to relapse himself, that these health agencies are especially interested. They therefore especially desire that the eight weeks' treatment should be carried following relief of the acute symptoms in all cases of malaria.

"Many physicians throughout the country have adopted the Standard Treatment and advise all of their patients to take quinine for eight weeks following the relief of the acute attack to get rid of the infection. One of the obstacles met with by those who are doing this has been the high price their patients have had to pay for the necessary quinine for the eight weeks' treatment.

"To aid physicians who will co-operate with the efforts of the health agencies, by giv-

ing their malaria cases the Standard Treatment to cure their infection, arrangements have been made with a large manufacturer and dealer in quinine and quinine goods, to put up and supply for sale through the usual trade channels the eight weeks' treatment part of the Standard Quinine Treatment for Malaria. It is put up in packages containing the necessary amount for the full eight weeks' treatment, labeled with an approved label stating clearly the contents of the package, the age of the person for whom it is intended, and the retail price." * * *—*U. S. Public Health Bulletin.*

Marriages.

Smith-Harrison—Dr. Frederick E. Harrison and Miss Mittie Smith, of Fordyce, were married September 28, 1921..

McClain-Weny—Dr. Nicholas F. Weny, City Physician of Little Rock, and Miss Gladys McClain, of North Little Rock, were married August 10, 1921. Dr. and Mrs. Weny will reside at 1512 College Street.

Obituary.

DR. J. C. CHENAULT.—John Calhoun Chenault, M.D., England, age 55, died September 28, 1921. He is survived by his wife and two sons.

County Societies.

LAWRENCE COUNTY.

(Reported by H. R. McCarroll, Sec.)

The Lawrence County Medical Society met in Hoxie, Wednesday, September 7, 1921, at 4:00 o'clock p. m.

Present: C. C. Ball, A. J. Clay, T. O. Guthrie, W. W. Hatcher, J. C. Hughes, J. C. Land, H. R. McCarroll, C. C. Townsend, and Frank D. Smythe and Mrs. Brown as visitors.

T. C. Guthrie, of Smithville, read a paper on "Heat Stroke or Insolation," and while in the rural districts, we rarely have a case, it was a good paper and we were glad to be refreshed on the etiology and treatment of the disease.

Frank D. Smythe, of Memphis, was present and read a paper on "The Suturing of the Musculo-spiral Nerve and the Transplantation of the Tendon of the Flexor Carpi Radialis to the Tendons on the Back of the Forearm for the Restoration of Wrist Drop, Following Injury or Severance of the Musculospiral Nerve." Some cases were reported. This is comparatively a new operation and in selected cases will render a great service to humanity. The operation stands as a monument to the late John B. Murphy.

The papers were well discussed and some valuable information was brought out to the advantage of all present. Riley Henry Guthrie of Smithville was unanimously elected to membership.

Mrs. Mary Ellis Brown, of the Bureau of Vital Statistics, was present and made us a good talk. Come again.

The following physicians were present at the Medical Society Meeting last week:

G. A. Warren, W. J. Robinson, H. R. McCarroll, R. H. Guthrie, and C. C. Ball.

A general discussion of malaria with modern methods of treatment and the findings of the government commissions, and a paper on the Danger of Pituitrin by G. A. Warren, took up the time of the afternoon.

Book Reviews.

DISEASES OF THE SKIN—By Richard L. Sutton, M. D., Kansas City, Mo. Fourth edition, revised and enlarged. Nine-hundred-sixty-nine illustrations and eleven colored plates. Published by C. V. Mosby Company, St. Louis, Mo., 1921.

This edition has been thoroughly revised and a great many new illustrations added. It presents the entire subject of dermatology in a comprehensive and concise manner. We are of the opinion that this volume will be the most popular of all works on this subject and should prove of value to the entire medical profession.

A TREATISE ON CATARACT.—By Donald T. Atkinson, M.D., Fellow of the American Academy of Ophthalmology and Oto-Laryngology, San Antonio, Texas. Illustrated. Published by the Vail-Ballou Company, New York.

In this volume Dr. Atkinson presents to the profession a general resume and a synopsis

of the most approved methods for the operation and after treatment of cataract.

The illustrations are original and an effort has been made to give the technic of each step of the various procedures more clearly, perhaps, than they are represented in the average textbook.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1920.—Cloth. Price, postpaid, $1.00. Pp. 72. Chicago. American Medical Association, 1921.

While New and Non-official Remedies consists in part of descriptions of those proprietary medicines which the Council deemed worthy of consideration by the medical profession, the Annual Reports of the Council on Pharmacy and Chemistry describe the preparations which the Council finds unworthy of recognition. In addition, these annual reports contain other announcements of the Council.

The present volume contains a number of interesting reports. Thus we find a statement which makes it clear that many of the large pharmaceutical houses are definitely opposed to the work of the Council and will remain antagonistic until a very large proportion of the medical profession will give the Council their active support. The volume also contains a report on some digitalis preparations which the Council examined and declared to be pharmacopial digitalis products and therefore do not require the control of the Council.

Of the reports on proprietary medicines found unacceptable for New and Non-official Remedies there are reports on the the following which, because of the publicity given the products by their exploiters, will be of special interest to physicians: Platt's Chlorides, Syrup Leptinol (formerly Syrup Balsomea), Sukro-Serum, Spirocide, Libradol, Supsalvs.

Of considerable interest are reports on a number of products which were admitted to New and Non-official Remedies on the basis of evidence which at the time seemed to indicate the products to have therapeutic merit, but which did not stand the test of time and which therefore have been omitted from the 1921 edition of New and Non-official Remedies. These reports give evidence that great care is taken to keep New and Non-official Remedies up to date.

Those who are not familiar with the methods of the Council in the examination of new medicaments or who may even have been inclined to look upon the acceptance or rejection of a medicament by the Council as a somewhat perfunctory procedure, should read the report of "Chloryptus"—a chlorinated eucalyptus oil. Its proprietor believed it to be a most efficient wound antiseptic. He presented to the Council many lengthy reports of laboratory tests and of clinical trial. The Council found the evidence inconclusive and refused recognition to the product. The discoverer of Chloryptus apparently has accepted the conclusion of the Council—at all events it is not being pushed—and thus many a physician is spared the temptation of experimenting with a new drug which in the end will but add to his long list of medicaments which have been tried and found wanting.

The Secretary of the County Society will please notify the State Secretary immediately of any error or change in these officers.

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OF THE

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1921

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Original Articles.

THE NONSURGICAL TREATMENT OF SURGICAL TUBERCULOSIS.

J. D. Southard, M. D., F. A. C. S.,
Fort Smith.

At the conclusion of a paper on the general treatment of tuberculosis which I had the honor to read before this Society at the Eureka Springs meeting a year ago, I made the following statement which experience since then leads me to emphasize rather than modify, "I believe the Roentgen ray is by far the most valuable agent ever known in the treatment and cure of all forms of tuberculosis and that its timely and judicious use will eliminate surgery in practically all tuberculous lesions; that no operation for removal of any tuberculous gland or other tissues or parts should ever be done if proper Roentgen ray treatment is available since it will cure practically all of these cases without disfiguration, without the loss of function, or of any healthy tissue, without the use of anesthetic or loss of blood and without the least pain or danger to the patient."

I wish to ask your indulgence at this point for the report of four selected cases which I will make as briefly as possible, to illustrate and emphasize the value of the Roentgen rays in the treatment of surgical tuberculosis.

Case 1. Mr. C., age 34, married; no children; came to me with tuberculosis of the right testicle, the left testicle having been removed some months previously, when it was, as the patient stated, "in exactly the same condition as this one is now." Examination showed the organ to be the size of a man's fist, very tender and painful, the pain following up the cord into the abdomen. There was a sinus opening through the lower segment from which there was the characteristic, yellowish, watery, purulent discharge. No lung involvement or other abnormal condition was found. He was told nothing as to the nature of the trouble with the left testicle at the time he was operated upon. The diagnosis of tuberculosis was made and he was given Roentgen ray treatments and tuberculin twice a week. The pain was relieved by the first treatment and did not return. The swelling gradually subsided, the discharge grew less and at the end of six weeks the sinus was closed. In four months the testicle was of normal size and the patient was clinically cured. There was no recurrence up to October, 1920, two years after completion of treatment.

Case 2. Mrs. T., age 19, mother of one child. This young woman had had trouble in the right iliac region for more than a year. Appendicitis was diagnosed by her physician shortly after the beginning of her trouble and the appendix was removed through a median incision. The only report the operating surgeon made to her as to the appendix was that it contained a pin. She was not relieved by this operation and a few months later a second operation was done, the incision this time being made at McBurney's point. Still no relief was obtained and later a third operation was advised. This was declined and I was called to see her. I found her general health wretched indeed. There was a large hard mass occupying the entire lower right quadrant of the abdomen, extending over beyond the median line. There were two discharging sinuses, one at the site of each former incision. The Roentgen ray showed that the os ilium was involved and that considerable destruction of bone had already taken place. A diagnosis of tuber-

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culosis was made and she was treated accordingly. In a few weeks this large mass began to recede and to soften under the effects of the rays. The median sinus closed, and later the other one also closed. Regeneration of the bone had taken place and a healthy condition was restored at the end of four months' treatment. This patient has remained perfectly well now for five months and I feel confident she will have no recurrence of her trouble.

Case 3. A five-year-old child suffering from tuberculosis, situated in the lumbar spine. The Roentgen ray showed that the body of the third lumbar vertebra was entirely destroyed while the fourth was slightly involved. She was in very bad general health and was unable to stoop. There was the characteristic walk of scoliosis. She was treated with the Roentgen rays alone, no plaster jacket or other brace was used, and no tuberculin was given. She was rayed twice a week for two months; then once a week. Improvement was noticeable in a very short time and continued uninterruptedly. She gained in weight almost from the beginning of the treatment, the fever and pain subsided, and at the end of five months she seemed entirely well. She is now in excellent health, runs, jumps and plays as well as any child. There is now normal mobility of the spine. There is, of course, no decrease in the deformity, though it is scarcely noticeable when she walks.

Case 4. Miss E., age 17, came to my office on crutches, suffering with tuberculosis of the right foot, of three years standing. A Roentgenograph showed extensive destruction of the tarsal bones and involvement of the metatarsals. There was a discharging sinus below and posterior to the internal malcolus communicating with the diseased bones. She was anemic and badly run down. She was given the combined treatment, Roentgen rays and tuberculin twice a week. The pain, tenderness and swelling began to decrease almost immediately, and she began gaining in weight and improving in general health. A recent picture shows that a wonderful regeneration of bone has taken place in this foot, refilling the cavity caused by bone destruction. She can now walk without crutches or cane and looks the picture of health.

These cases are here reported simply to show by way of illustration what this treatment will do. I could report many others of various sorts and organs treated with equal success, including the kidney, hip joint, knee, hand, the various scofulous conditions, lupus, rodent ulcers, lymphatic glands, larynx, etc., but I refrain because I do not wish to tax your patience too much with case reports. I hope to embody some of these cases in a later and more comprehensive report. It is, I believe, a duty which every true surgeon owes and will give to his patients to advise them of a treatment which promises all, and often times much more, benefit than can be accomplished by the use of the knife. A treatment which is painless, bloodless and scarless and which, should it fail, in no sense militates against the use of the knife as a last resort, should certainly receive the earnest careful attention and consideration of all physicians.

As is well known, the treatment of superficial tubereulous lesions with the Roentgen rays has been practiced for many years. Many such conditions were cured before the advent of the Coolidge tube. I believe I am among the first to use it in the treatment of the deeper structures in the manner made possible by the use of the Coolidge tube. This treatment, as I am now using it, consists of raying the diseased parts two or three times a week using, when practicable, the crossfiring method without ever intentionally giving a full erythema dose and depending upon the penetrating gamma rays, except for the more superficial lesions. I administer tuberculin twice a week in suitable cases. I enjoin rest of the affected parts together with all hygienic measures the same as in cases of pulmonary tuberculosis.

DISCUSSION.

C. E. Benefield, Conway: First, I desire to say that if Dr. Southard's claims for this line of work be true, it is a long step in advance of our medical age or time, one which will make it possible to stamp out the White Plague from the human family. I regard this as wonderful, to be able to turn an x-ray on such a disease and destroy the lesions wherever found in the human anatomy.

However, I do not know enough about the x-ray to intelligently discuss this paper.

A few years ago, I had a doctor friend who asserted that he could cure appendicitis, pneumonia, typhoid fever and tuberculosis with the x-ray. I did not take his claims seriously, but after hearing

Dr. Southard's paper at Eureka Springs in which he cited clinical cases of pulmonary tuberculosis which had been cured by roentgen ray, I became intensely interested. I have been looking up some men of equal reputation who make claims somewhat along the same line of x-ray therapy since having heard his paper at Eureka Springs, and Dr. Southard comes before us now with clinical reports of tuberculosis tumors cured with the roentgen ray. I have known Dr. Southard since I was quite a young man in the profession and I know that he is not easily influenced by new theories. I know of no man whom I regard as more logical in his professional deliberations than he. I have more than ordinary confidence in his ability to make a correct diagnosis, and I consider his integrity and honor above reproach. Yet, gentlemen, I do not have the confidence in his, or any other man's ability, to make a correct diagnosis of a tubercular tumor without the aid of the pathologist. I do not believe that Dr. Southard had tuberculosis in either of the cases reported, but had some other class of tumor. I have as much confidence in Dr. Southard's ability along this line as I have in any man in this Society, but I do not believe he can discriminate between the different tumors. Neither do I believe he can always be correct in his diagnosis of pulmonary tuberculosis, to say nothing of tubercular tumors. I notice Dr. Southard did not say in his case reports that he had made any sure tests of either of the cases by which he could be positive he had a tuberculosis case. I wish he would say whether he did, or did not, in his concluding remarks. I know something of Dr. Southard's x-ray work in other lines. I have been referring my tumor cases to him for years, some malignant and inoperable, one of which I recall was in the mouth of a young lady; a sarcoma, which he permanently cured. But, gentlemen, I am from Missouri, in his claim for his roentgen treatment in tuberculosis cases until his claims are backed up by some competent laboratory man.

I am intensely interested in this line of work the doctor is doing and I trust he will be able to come before this Medical Society one year from date with such pathological case reports as will thoroughly convince us all as to the tubercular therapy of the doctor's roentgen ray. I trust I may have reasons to apologize to the doctor and the Society for my skepticism in regard to the work he is doing, and this I will only be too glad to do.

I know that all things that have been discovered by medical men that are worth while have had their periods of doubt and criticism. Any one can criticise, but it takes a capable man to go into the mysteries of science and discover things capable of saving men from disease and death.

I am quite sure Dr. Southard understands the spirit of my criticism and I hope his claims will find their place in the therapy of tuberculosis in its every phase.

Dr. E. H. Hunt of Clarksville: Dr. Southard understands, and maybe the rest of us do, that the possibilities of the x-ray are still in the future. It is still in its infancy, and we need not be surprised at a lot of statements and a lot of new reports about what the x-ray will do and is doing. He made one statement in his case No. 3 there, that I would like for him to explain. He said that one of the vertebrae was entirely destroyed. If that were true, I can't see how the child could walk at all, if he had one joint out. He said that the child had a bad walk. I would like for the doctor to explain that more fully, so that we might understand it. If that is really true, and he meant it that way, we want it to go through he reports that way. I would like for him to state the condition of the child now, after he has gotten the child well enough to run around and jump and play. I wonder if that vertebrae is recurrent, or if the rest of the vertebrae have shrunk down a notch, and taken another bite on the spinal cord down there.

The x-ray, in my hands, has proven so valuable and so dependable that, if I am in doubt about it, I ray them anyhow, and the diagnosis is usually cleared up by the improvement that takes place under this treatment.

Dr. Southard, in response: With reference to Dr. Hunt's question, I will just say this, as I stated in the paper, the body of this vertebrae, not the entire bone, was shown to be destroyed, and there was a jutting out laterally, the bones from above and below coming practically together, causing a scoliotic condition which frequently takes place in these cases where the body of one bone is destroyed, by the other bones approximating each other and virtually filling that space.

Of course, my experience in this work has been too limited, perhaps, to base conclusions upon, but I simply report here these four cases, because they were of different type and because of the results that were obtained by this treatment.

As to the diagnosis, of course, men who are in the habit of seeing and treating a great many cases of tuberculosis have very little trouble in arriving at a diagnosis in cases of this kind, the only time of doubt being in the early acute stage; and when the bone is involved a roentgenograph will usually clear this up, while a few x-ray treatments will abate the symptoms.

THE SKIN LESIONS OF SYPHILIS.

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Hot Springs National Park.

The skin lesions of syphilis, although not the most important, are the most striking manifestations of the disease, and are the ones which, next to the chancre, most frequently first lead the patient to the physician. That great significance was attached to these phenomena by the early syphilologists, and by the laity of the times as well, is attested by the term "the big pox," which term is still applied by certain individuals.

It is not surprising that lesions which exhibit so many and diverse forms as the cutaneous manifestations of syphilis should present difficulties of description and classification, and while the all-important point for consideration of a pathological cutaneous condition is, whether or not it is syphilis, it is most desirable for purposes of description to classify the lesion.

The term *syphilide* has most frequently been employed to designate the cutaneous manifestations of this disease; but it would seem that upon etymological grounds the term *syphiloderm* is more correct.

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Classification.

Nearly all modern syphilographers describe the syphilodermata as occurring in the various classical forms of skin eruption; macules, papules, vesicles, pustules, tubercles, etc., while each one divides the forms into subclasses, according to his own observation. The following classification, while perhaps open to some objections, seems to me to include all the known varieties of the skin manifestations of syphilis:

I. Macular:
  (a) Roseolar.
  (b) Annular.
  (c) Pigmentary:
    (1) Spots or patches.
    (2) Retiform.
    (3) Marmoraceous.

II. Papular:
  (a) Miliary or follicular.
  (b) Lenticular or flat:
    (1) Ordinary.
    (2) Nummular.
    (3) Annular or circinate.
    (4) Papulosquamous.
    (5) Moist papular or condyloma lata.
    (6) Vegetative.

III. Vesicular (rare).

IV. Bullous (rare).

V. Pustular:
  (a) Acuminate:
    (1) Small.
    (2) Large.
  (b) Flat:
    (1) Small.
    (2) Large.
      i. Superficial.
      ii. Deep.

VI. Nodular or Tubercular.

VII. Gummatous.

While the above classification covers the general characteristics of the syphilodermata, it is not unusual to find two or more varieties in the same individual. Thus a maculopapular syphiloderm or a papulopustular syphiloderm frequently is observed.

Pathology.

The gross pathology of the cutaneous lesions of syphilis, which, as will be seen, are many and varied, and which occur at varying periods following infection, may be considered more in the light of symptomatology than pathology and will be fully described under the appropriate headings. The histopathological picture of these lesions while presenting many interesting features, is not nearly as striking as their gross appearance. In general, it may be said of the syphilodermata that they truly represent the reaction of the tissue to the invasion of the spirochetae and show various combinations of exudation and repair. There is more or less infiltration of lymphocytes and plasma cells, and endarteritis and some giant cell formation, while spirochetae are found more or less plentifully, particularly in the early types of lesions.

Description.

Macular Syphiloderm—The most frequent form of the macular syphiloderm is the *roseolar,* which is also the most common of all the skin manifestations of syphilis. This usually is observed six to seven weeks following the appearance of the chancre, although the time may be shorter or considerably longer. This eruption also may be observed as a recurrence as long as several years after the chancre.

The roseolar syphiloderm in the majority of cases begins on the upper abdomen, spreads to the thorax and later may involve nearly the entire surface of the body. This syphiloderm consists of variously sized spots, which usually are on a level with the surrounding skin, but may be slightly elevated. The average size is about one centimeter in diameter, although they may be considerably smaller and occasionally become much larger. The shape is round or oval with distinct or irregular outline. At first the color is a pale pink or reddish-violet, which disappears on pressure; but later assumes a dark red, coppery tinge, often described as resembling the color of lean ham. The development of the roseolar eruption may be very sudden, sometimes being brought out by violent exertion or occasionally by a hot bath. On the other hand, its development may be very insidious, re-

quiring a week or more after its appearance to reach its maximum.

Often the spots are faint in color and escape notice until the surface of the body is exposed, as for the purpose of physical examination. The number of the lesions varies from a few scattered spots to a profuse crowded condition, which occupies the greater portion of the cutaneous surface, leaving a comparatively small area of normal skin between the macules. Rarely coalescence takes place. The eruption usually persists for several weeks and may disappear quickly or gradually. Ordinarily there is little or no desquamation, although with palmar lesions this is not infrequent.

The annular macular syphiloderm is rare and is generally seen as a recurrence. It is usually observed rather late in the course of the disease, from one to several years after infection. It is most frequently found on the flexor surfaces of the forearms, buttocks, sacral region, abdomen and thighs, and never observed on the face, as is the annular papular syphiloderm.

The pigmentary syphiloderm has been the subject of much discussion and its existence as a distinct syphilitic eruption has been questioned. There seems no doubt, however, that aside from the pigmentation of the skin following certain other syphilodermata there occasionally develops an original discoloration of the skin due to syphilis.

According to Taylor,[1] three varieties of the pigmentary syphiloderm are seen, which are as follows:

1. Spots or patches of various sizes.
2. More or less diffuse pigmentation, sooner or later becoming the seat of leukodermic change in the shape of small rectiform spots which gradually increase in size.
3. A so-called marmoraceous pigmentary syphiloderm formed by an abnormal distribution of the pigment of the skin, some places becoming whiter than normal by the lack of crowding out of pigment, and others darker by the abnormal distribution of pigment.

The pigmentary syphilodermata occur at varying periods following the initial lesion, usually, however, from about the sixth month to the end of the first year. In one case seen by me this manifestation was observed eight months following a chancre of the left labium majus. The pigmentary syphiloderm may be the only syphilitic lesion present, or it may occur in connection with other syphilodermata. It is most frequently seen in females, males being rarely affected in this manner.

Popular Syphiloderm — This- variety of syphilitic eruption may follow the macular syphiloderm, the latter merging into the papular variety gradually so that the term maculopapular syphiloderm may be applied with perfect propriety. On the other hand, the papular syphiloderm may appear as the first rash of the disease. The time of the appearance of this syphilitic lesion is subject to great variations, it being observed sometimes as early as the second or third month, or as late as several years following the initial lesion, although the average time is between the third and fourth month for the miliary variety and possibly a little later for the lenticular type. One characteristic of the papular syphilodermata is their tendency to recurrence, and this phenomenon may be noted under one form of another for a number of years.

While the *miliary papular* syphiloderm is of comparatively frequent occurrence, it is not noted as often as the lenticular form. The miliary eruption varies in size from a pinhead to that of a French pea, is usually associated with the hair follicles and is therefore sometimes termed *follicular*. This lesion consists of acuminate or rounded projections, solid and rough to the touch, which, when large, sometimes show a slight umbilication. Frequently early in the course of the development of the miliary papular syphiloderm there is a tendency shown by the large lesions to form minute vesicles at the summit which last only a few days, and upon drying show an epithelial scale. Occasionally also the summit is surrounded by a small pustule. The most frequent location of this syphiloderm is on the face, neck, shoulders, back, arms and thighs. The separate lesions are often closely crowded and tend to form groups in circles or semicircles with ten to forty papules in a group, while the intervening skin is normal. As with the syphilodermata in general, pruritus is rarely present, except in the negro race, where this symptom may be marked.

The lenticular or flat papular syphiloderm is, next to the roseolar syphiloderm, the most frequently noted of the skin lesions of syph-

ilis. The papules are round or oval, flattened, slightly convex, raised from one-half to one millimeter above the surrounding skin, have sharply defined borders, and, as a rule, show marked infiltration; which is easily detected by palpating a lesion between the thumb and forefinger. They vary in size from that of a pea to a lima bean, or larger, although in the beginning they are small and gradually increase in size. When very large this type of syphiloderm is sometimes termed nummular, and is occasionally seen as large as a silver half dollar or larger. The color is a dull brownish red. This syphiloderm is distributed very extensively over the body; but particularly on the forehead, where it constitutes the well known *Corona Veneris*.

In certain cases, especially in negroes, there is a tendency to ring formation, the eruption appearing as complete or partial circles, and is given the term annular or circinate syphiloderm. This condition is brought about, according to Hazen,[2] in a number of different ways and may develop from the miliary lesions, as well as from the lenticular. As it probably always develops from one or the other of the papular syphilodermata, it should not be considered as a distinct variety.

The lenticular papular syphiloderm quite frequently shows a tendency to marked desquamation instead of the slight scaling usually noted; which has led to the term papulosquamous syphiloderm. On account of the resemblance of this condition to psoriasis, it has erroneously been designated syphilitic psoriasis. The papules at first usually become slightly less elevated and an accumulation of epidermic scales takes place. This scaling may be very slight and the scales thin and wrinkled, or it may be very marked, the scales being dry, or a dirty grayish or brownish color, thick and usually friable. Occasionally they are hard and horny and adherent. When removed the papule is seen beneath, flat and of a dark red color. Pruritus is rare and never marked except in the negro. Those papules which appear late in the disease or as recurrences are more likely to exhibit this tendency of desquamation. Also those of certain localities, as on the face, along the eyebrows and chin, and on the palms of the hands and the soles of the feet show a special predisposition to this condition.

While the palms and soles may be the seat of most of the syphilodermata, when they are attacked by the papulosquamous form the terms palmar and plantar syphiloderm are applied. Although these lesions are papular in character, they present certain peculiarities which account for the special terms. These peculiarities are due to the thickness of the epidermis of these regions and the firm adherence of the dermis to the underlying fascia. The papules are flat with scarcely any elevation above the surrounding surface, although there is distinct infiltration. At first they appear more as macules than as papules, are of a dull red or yellowish-red color and vary in size from that of a pea to the diameter of a silver ten-cent piece. Later the epidermis becomes partially separated, the color being a dirty gray, while beneath, the underlying lesion retains the usual red color. The papules usually first develop in the center of the palms or soles and may extend by creeping, with an elevated border, to the fingers and toes or even to the dorsal surfaces. There is also a tendency to coalesce, the whole surface of the palm or sole being covered by the lesion.

Sometimes the natural folds or furrows of the skin of these regions become the seat of deep cracks or fissures which may become exceedingly painful and refractory.

While this type of eruption is more frequently observed on the palms of the hands, it is sometimes seen on the soles of the feet as well, as occasionally on the latter alone. Rarely only one hand or one foot is attacked. This type of lesion appearing late in the course of the disease is often most resistant to treatment, and even when observed early with other syphilodermata, it is usually less amenable to therapy than the concomitant lesions.

When a lenticular papule, instead of desquamating, presents a more or less moist appearance, the term moist papular syphiloderm or condyloma lata is applied. It seems to me, however, that the latter term should be restricted to the vegetating type, which will be described later. This type of lesion is usually met with early in the disease and may be observed with other types or alone. However, if not treated, it may persist almost indefinitely and has been observed as a recurrence

as late as twenty to thirty years following the chancre. The moist papule usually begins as a flattened elevation, circular, and varying in diameter from two to three millimeters to one centimeter. The reason that certain papules develop into the moist type is to be found largely in the location. The thinness of the skin, the apposition of contiguous surfaces, the warmth and the moisture from perspiration, all act as contributing factors. The most frequent location of the moist papule is about the anus and genitalia, especially in women. Not infrequently in the latter, this eruption may be the only skin lesion developing throughout the entire course of the disease. The corner of the mouth, the nasolabial fold, the axillae, the skin beneath the breasts, the interdigital spaces and the skin around the umbilicus may be the seat of this lesion.

As stated, the moist papule begins as a flattened, elevated lesion which, instead of desquamating, becomes soft and the surface presents a grayish or brownish-gray, easily detached, mucoid pellicle, composed of macerated epidermis. Sometimes large, flat patches are formed by the coalescence of two or more lesions. Not infrequently these papules may become ulcerated. The moist papular syphiloderm, instead of becoming flat, occasionally hypertrophies and becomes warty or papillomatous. Several lesions coalesce and a large cauliflower mass, surrounding the anus or, in the female, the vulva, may develop, and is termed vegetating syphiloderm or condyloma. These lesions may occur in other localities, as, for example, the nose. They are accompanied with more or less mucoid secretion and unless strict cleanliness is observed a most foul odor develops.

Vesicular Syphiloderm—Fox[3] flatly denies the existence of a cutaneous lesion in syphilis worthy of the name vesicular. Morrow[4] states that vesicles are sometimes formed on erythematopapular lesions due to the intensity of the inflammatory process; but considers them as an accidental or accessory phenomenon and of limited duration. He therefore does not think that this type of lesion should be elevated to the dignity of a separated class.

On the other hand, Duhring[5] states that while the majority of so-called syphilitic vesicles may more properly be viewed as early pustules, occasionally lesions are observed that present throughout their course characteristics which entitle them to be termed vesicular. This author states that Bassereau and also Hardy have described these lesions at length and that they are of various size, from pinhead to split-pea, more or less acuminated, disseminated or grouped, flat or semi-globular with or without umbilication. They always occur within the first year, usually within the first six months and are generally associated with other lesions.

Dennie[6] described the lesions of one case observed by him as being one to four millimeters in diameter, sparsely scattered over the back and flanks, elevated considerably above the surrounding cutaneous surface and appearing translucent and tense with fluid as if quite deeply situated.

Bullous Syphiloderm—This variety of syphilitic lesion is also very rare in the acquired form of the disease and its existence is denied by some authorities. Fox[3] states that it is never seen when the patient is not suffering from iodism, and Morrow[4] says that it can not be considered as a distinct type, as the lesions which begin as bullae rapidly undergo a purulent transformation. This probably is usually the case, but undoubtedly sometimes bullous lesions develop which do not become pustular. They are, as a rule, developed late in the course of the disease and generally in individuals of markedly lowered vitality. They are discrete, disseminated, round or oval blebs, pea to walnut sized and surrounded by a dark red areola. They either rupture or collapse without rupturing and dry to brownish or greenish crusts. Beneath the crusts are erosions or ulcers which upon healing leave pigmented cicatrices.

Pustular Syphiloderm—This variety of syphilitic lesions may develop from a previous macular or papular eruption, or it may appear as the first skin manifestation of the disease. It is rare to see all of the lesions in any one case of the pustular variety, papules also being observed in greater or lesser profusion. This syphiloderm is most frequently seen in individuals of lowered vitality whose general health is not good. It is, however, undoubtedly caused, not by the spirocheta pallidum alone, but secondary pyogenic organisms are responsible to a large extent for

its development. While it usually appears within the first six or eight months following the chancre, it may be seen, especially as a recurrence, much later in the course of the disease. This variety of syphiloderm is a much less frequently observed lesion than either the macular or papular varieties.

The acuminate pustular syphiloderm occurs as the name implies as pointed or rounded pustules. The size varies from that of a pinhead (small) to the size of a pea (large). The small-sized eruptions are often referred to as miliary and the large-sized as acneiform or varioliform. The small size are always, and the large size sometimes, connected with the hair follicles. When the lesions begin as papules there is usually a pinkish-red to dark red base which may continue as such or be transformed into a part of the pustule. Even the small-sized pustules sometimes show a slight depression of the summit, while this umbilication is more frequently observed in the larger lesions.

Both sizes are usually quite abundant and may be distributed over almost the entire cutaneous surface. There is, however, a tendency to form groups, especially when appearing as recurrences when, as a rule, the eruption is also more scanty. The development of the acuminate pustular syphiloderm is sometimes rapid; but usually is more or less gradual, lasting several weeks, showing little disposition to spontaneous cure. The pustules dry to crusts which fall off and leave a fringe-like exfoliation of epidermis around the base which has been termed the "collaret." In the larger lesions a superficially eroded base is found beneath the crusts when first formed. The small lesions may heal with no trace left behind, but a slight pigmentation, or they may leave small pits; while the thinning with slight scarring.

The large and small, flat pustular syphilodermata resemble each other in many respects, but in certain other respects they are so markedly different that it is thought best to describe them under separate headings.

The small, flat, pustular syphiloderm, often called impetigoform, is a rounded or oblong, flattened, pustular eruption, varying in size from two to three millimeters to one centimeter in diameter. It is usually superficially located and rarely is deep. It is formed particularly on the hairy parts, the scalp, the pubes, in men on the chin; but is also seen in other localities, as the forehead, nasolabial fold, and rarely on the abdomen or back. The lesion is usually observed as a discrete eruption, but irregular grouping sometimes is seen; while in certain localities, especially the scalp, coalescence is not uncommon. The development of the small, flat, pustular syphiloderm is usually somewhat rapid and soon dries into a thick, dirty yellow or brownish crust, which may or may not be adherent. Beneath the crust, which sometimes does not completely cover the base, is seen a slight ulcerated area, which, upon healing, leaves little scarring, but a pigmented spot may persist for considerable time.

The large, flat, pustular syphiloderm is observed as a superficial or as a deep lesion, the latter being seen later in the disease and is rarer. The superficial lesion does not differ materially from the small, flat, pustular syphiloderm, except in size and in the usual location, which is on the lower extremities, neck, inguinal and gluteal regions and rarely on the trunk. These pustules dry to yellowish-brown or brownish crusts, are more or less adherent, and when removed leave an ulcerated base with an infiltrated, dark red border. A crust may reform several times before the process of healing is complete. Occasionally the crusts form so rapidly that the term *pustulocrustaceous* syphiloderm is applied.

The deep-seated, flat, pustular syphiloderm is usually a late manifestation of the disease; but has been noted during the early course in severe or so-called malignant syphilis. In this type of lesion the crust is thicker and of a darker color, even a brownish-black, with sometimes a greenish tinge. Upon removal of the crust a punched out ulcerative area is revealed, which is grayish, dark brown or bright red in color and secretes a purulent, bloody fluid, which in a short time forms another crust. Or the crust formation may go on without removal of the superficial crust and several layers be formed, one beneath the other, until a laminated shell-like lesion, which is termed rupia, is observed. Sometimes the crust is slightly smaller than the underlying ulcer and has the appearance of having been "cut to fit."

The most frequent location of this type of lesion is on the face, arms, back and shoulders.

It may be rather abundant, but rarely is profuse. Sometimes two or more lesions may coalesce, forming large crustaceous areas and it has been observed that extensive pustular syphilodermata frequently follow severe chancres. The healing process is usually slow.

Nodular Syphiloderm—This type of syphilitic lesion is, as a rule, a comparatively late manifestation of the disease, but it may develop within the first year when it usually is associated with the papular syphiloderm, or the lesion may partake more of a papular nature and the condition is spoken of as papulonodular. The true nodular or tubercular syphiloderm consists of a firm, circumscribed, more or less elevated lesion, which may involve the whole thickness of the skin. It is of a reddish-brown or copper color and varies in size from a pea to a good-sized hazel nut. The surface is sometimes smooth and glistening, or it may be covered by a thin scale of exfoliating epithelium. This type of syphiloderm may develop on any portion of the body; but it is most frequently seen on the head and face, particularly the forehead and nose. The coalescence of several nodules may form a circinate or serpiginous lesion which terms have been applied. The serpiginous lesions tends to advance peripherally, leaving central scarring, though individual nodules are always observed. The development and retrogression of the nodular syphiloderm is usually chronic and as new lesions appear, the duration of the condition may be months or even years. The termination is either by absorption, exfoliation, pustulation or ulceration. When exfoliation is excessive the term tuberculosquamous is applied, and if a pustule is developed in the lesion, as rarely occurs, it is called tuberculopustular. However, ulceration is the usual termination of the nodular syphiloderm.

Gummatous Syphiloderm—This variety of syphilitic lesion is usually the latest of the skin manifestations of the disease to develop. As a rule, it does not occur before the third or fourth year following the initial lesion, but may be as late as the twentieth, thirtieth or even fortieth year. On the other hand, gummata of the skin have been noted within a few months following the chancre.

The essential difference between the gummatous and the nodular syphilodermata is that the former is subdermal in origin while the latter is intradermal. A gummatous syphiloderm first appears as a small nodule beneath the skin, gradually increasing in size, stretching the skin and changing its color to a dull red. The growth may be slow or rapid until the size of a walnut or larger is attained.

At this time it is hard, firm, distinct from the surrounding tissues and freely movable. There are no subjective symptoms, and it may pass unnoticed. It now becomes necrotic and begins to soften in the center, while it is accompanied with more or less pain and tenderness. Finally the skin over the gumma breaks down and ulceration takes place. The ulcer gradually tends to enlarge, and a comparatively small amount of a yellowish, viscid, gelatinous material escapes. Later on the central necrotic mass or core is expelled, and a circular, punched-out lesion with indurated dark brown borders results. It varies in depth from five to ten or more millimeters. Rarely there is a tendency to spontaneous healing, though usually this begins as the result of treatment.

If, as often occurs, instead of developing as a circumscribed tumor, the gumma becomes diffuse, a considerable area may be affected from the beginning. The skin over the lesion is at first pinkish, but later becomes a dull red. Ulceration usually takes place in several places, and soon the entire area may be converted into an ulcerating lesion. The edges of the ulcer are usually straight and sharp cut, but may be slightly sloping.

Sometimes gummatous syphilodermata upon ulceration penetrate the underlying structures, and great destruction of tissue follows. On the other hand, the lesion may be comparatively superficial, be small, slow of development, with little or no tendency to ulceration.

While no part of the cutaneous surface of the body is immune to syphilitic gummata the lower extremities are most frequently attacked. Such lesions sometimes appear on the penis and undoubtedly have been mistaken for chancres. (The so-called *chancre redux*).

Diagnosis.

The skin lesions of syphilis may simulate almost any form of cutaneous disease. There are, however, in the majority of cases certain distinguishing features which enable the clini-

cian to make a correct diagnosis. The chief of these characteristics of the syphilodermata are the following:

1. Their dark red, ham or coppery color.

2. Their usual freedom from pain or pruritus.

3. Their usual development with little or no fever; but if fever does exist it is usually of a mild type.

4. Their comparatively slow development.

5. Their tendency to polymorphism.

6. Their frequent location on flexor surfaces.

7. Their usual firm consistency.

8. Their tendency to circular arrangement.

9. Their usual symmetrical development.

10. The usual circular formation and small size of the lesions developing early in the course of the disease.

11. The frequent development of papules.

12. The usual white color and nonadherence of the scales.

13. The greenish or black color, the irregularity, thickness and adherence of the crusts.

14. The tendency of the ulcers to kidney or horseshoe shape.

Nevertheless even with these characteristics in mind in some cases the diagnoses on clinical evidence alone can not be made and recourse to laboratory procedures or even therapeutic tests must be had.

It is impossible in the space of time allotted to me to give a complete differential diagnosis of all the skin lesions of syphilis; so I shall merely mention the dermatological condition which may be mistaken for each type of syphiloderm or for which the syphilitic lesion may be mistaken.

The roseolar macular syphiloderm usually presents little or no difficulty in diagnosis. The chancre is generally still present when this type of lesion is seen and other evidences of syphilis, such as sore throat, lesions of the mouth, falling of the hair, adenitis, etc., are nearly always to be found. The principal conditions from which this syphiloderm must be differentiated are rubeola, rubella, tinea versicolor, scarlet fever, pityriasis rosea, seborrheic dermatitis and the rashes sometimes following the use of such drugs as belladonna, cubebs, copaiba, opium, sulphonol, antipyrine, etc.

The annular macular syphiloderm, on account of its rarity, might be mistaken for erythema multiforme, ringworm or pityriasis rosea.

The pigmentary syphiloderm, in the superpigmentation stage, according to Taylor,[1] is to be differentiated from cholasma, and this may usually be accomplished by the history. Later, when the white spots are present, vitiligo may be simulated.

Tinea versicolor must also be differentiated from this lesion.

The diagnosis of the miliary papular syphiloderm is usually quite easily made by the history (perhaps the presence of the chancre) by the color, distribution and grouping of the eruption and by other evidences of syphilis. Scabies, keratosis pilaris, the early lesions of psoriasis, papular eczema, lichen planus, pityriasis rubra pilaris, acne, and lichen scrofulosus must all be differentiated from this lesion.

The lenticular or flat papular syphiloderm, as it most frequently appears, should be easy of diagnosis. The color, the distribution, the symmetrical development and the usual absence of subjective symptoms are characteristic, while other manifestations of syphilis, such as adenitis, syphilomycodermata and alopecia are usually present.

Some of the rarer varieties of this lesion, however, may present more difficulty.

Thus the annular or circinate papular syphiloderm, in common with the annular macular lesion, may be mistaken for erythema multiforme or tinea circinate.

The papulosquamous syphiloderm, owing to its marked resemblance to psoriasis, is not infrequently mistaken for that disease and is sometimes erroneously designated syphilitic psoriasis.

The moist papular syphiloderm, the lenticular papular lesion which, instead of desquamating, presents a more or less moist appearance, is usually easy of diagnosis. The history, the location on areas which are kept moist with perspiration, and the usual accompaniment of other syphilitic manifesta-

tions, in the majority of cases will enable the clinician to reach a correct diagnosis.

However, not infrequently the moist papular syphiloderm of the anal region has been mistaken for hemorrhoids unless a careful examination of the patient is made. This was most forcibly brought to my attention during my army service. I was summoned to the operating room of the base hospital, in which I was serving, and asked to pass upon the condition of the patient who was on the operating table anesthetized for a hemorrhoid operation. There were present not only a number of typical moist papules of the anus, but the remains of a chancre on the skin of the penis and a typical roseolar eruption on the abdomen, chest and arms.

The vegetating papular syphiloderm, or true condyloma, with its typical cauliflower appearance, is scarcely to be mistaken for any other lesion, particularly if other signs of syphilis are looked for as they usually are present.

The vesicular syphiloderm undoubtedly is of rare occurrence, however, its rarity should make its diagnosis more important. The appearance of small acuminated, translucent tense, vesicles on the back or flanks should be looked upon with suspicion. The history of chancre, the presence of other syphilitic manifestations or positive laboratory evidence should make the diagnosis certain.

The diagnosis of the bullous syphiloderm, which is also a most rare lesion in acquired syphilis, is to be distinguished from pemphigus and other similar eruptions by the more or less indurated base, the dark red areola and the character of the crusts, as well as the usual presence of other signs of syphilis.

The pustular syphilodermata usually present such characteristic appearances that an error in diagnosis should not be made.

The acuminate type of this lesion, however, often quite markedly mimics acne or variola.

The small flat, pustular syphiloderm must be differentiated from pustular eczema, especially when the lesions are on the scalp or beard, and from impetigo.

The only condition that may be mistaken for the large, flat, pustular syphiloderm is ecthyma.

The rupial syphiloderm is so characteristic that its diagnosis should present no difficulty.

The diagnosis of the nodular syphiloderm is sometimes attended with considerable difficulty. If, however, the history, the color, the tendency to form serpiginous or circinate lesions, the usual ulceration and the pigmentation are considered, errors should be rare.

Lupus vulgaris may resemble the non-ulcerating nodular syphiloderm, while the latter lesion when on the face is sometimes diagnosed lupus erythematosus. It also may be mistaken for epithelioma, acne rosacea or leprosy.

The gummatous syphiloderm may present some difficulty of diagnosis, especially in the early stages of its development, at which time it may be mistaken for tumors of various kinds, such as fibroid, lipoma and sarcoma. Later, when softening takes place, a resemblance to abscess, or suppurating gland may be seen. In the ulcerating stage the gummatous syphiloderm must be differentiated from chancre, chancroid, epithelioma, lupus and varicose ulcer.

The lesions of sporotrichosis have often been mistaken for gummata, both before and after the formation of abscesses, while tuberculous abscesses and ulcers may be confused with this type of syphilitic lesion at some stage in its development. The history in cases of gummatous syphiloderm may be of no value, as quite frequently this lesion develops many years after infection and the original disease is forgotten.

Finally, in making a diagnosis of the skin manifestations of syphilis, it must be remembered that nearly any of the skin diseases which simulate the syphilodermata may occur with the latter or in individuals suffering with syphilis, but without syphilitic skin lesions. In such cases the diagnosis may be extremely difficult. If, however, the history or the laboratory procedures point to syphilis, specific therapy would be justified, and the healing of the lesions would be very strong presumptive evidence of their syphilitic nature.

Treatment.

The treatment of the syphilodermata should begin with the chancre. In other words, if all chancres were accurately diagnosed in their incipiency, proper treatment instituted and vigorously carried out, the skin lesions of syphilis would be as rare as small-

pox. This statement serves to pave the way for a most urgent plea for the routine examination with the dark-field condenser by a competent worker of *all venereal sores before treatment, no matter how innocent they may appear.*

If, however, this has not been done and syphilodermata do develop, antiluetic treatment of the most vigorous sort is indicated. Added to this in certain types of lesions local treatment may be of benefit.

No local treatment of the macular syphilodermata is necessary. Nor is local treatment necessary with the majority of the papular eruptions. The palmar and plantar syphilodermata, however, should receive applications of an ointment such as the official unguentum hydrargyri nitratis. I have found bichloride collodion painted on these lesions very satisfactory.

Moist papular lesions and condylomata should be washed once or twice daily with bichloride solution (1 to 4,000) or carbolic acid (1 per cent), dusted with thymol iodide, calomel or salicylic acid, and covered with sterile gauze. The application of strong nitric acid followed by a dusting powder sometimes is beneficial.

Pustular syphilodermata may be treated with daily mercurial vaporizations or mercurial baths.

Nodular syphilodermata which have not ulcerated, as a rule, need no local treatment. When, however, ulceration has taken place, the methods outlined for the pustular lesions are applicable.

Gummata of the skin seen before ulceration also need no local treatment.

Ulcerating gummata of the skin may sometimes be treated successfully by the methods outlined above for treatment of the pustular syphilodermata. These lesions, however, not infrequently are more refractory. In such cases cauterization with silver nitrate or even the actual cautery or the use of a curet may start the healing process. Chronic leg ulcers may be stimulated to healing by "nicking" the edge of the ulcer at intervals of two to four millimeters with a pair of sharp scissors and by means of adhesive plaster strapping the edges back.

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1. Taylor: "The Pathology and Treatment of Venereal Diseases," Philadelphia, 1895, 638.

2. Hazen: Jour. Cutan. Dis., 1913, 31, 148.

3. Fox: Ibid., 224.

4. Morrow: "A System of Genito-Urinary Disease, Syphilology and Dermatology," New York, 1898, 2, 146.

5. Duhring: "Diseases of the Skin," Philadelphia, 1882, 519.

6. Dennie: Jour. Cutan. Dis., 1915, 33, 509.

STUDIES CONCERNING THE INFLUENCE OF ARSENICAL PREPARATIONS ON CUTANEOUS TESTS.

Strickler concludes:

1. The repetition of a luetin test in nonsyphilitic patients is capable of producing positive luetin tests in about 21 per cent of our subjects.

2. The intravenous administration of arsphenamin apparently stimulates the production of a luetin test in nonsyphilitic patients, and in our series we were able to produce 53 per cent positive luetin tests following the form of intravenous specific therapy.

3. In our experience the intravenous administration of cacodylate of soda acts in the same manner as arsphenamin, only more feebly.

4. The repetition of the tuberculin (von Pirquet) test may produce a positive finding, but very infrequently, occurring only once in our series of fourteen subjects.

5. The intravenous administration of arsphenamin is capable of producing a positive tuberculin (von Pirquet) test, previously negative. This occurred in three instances in our series of ten patients.

6. The anaphylactic food test made by either the endermic or scratch method does not seem to be influenced by the intravenous administration of either arsphenamin or cacodylate of soda. Our investigation of this phase of the problem is, however, not yet complete.

7. We are now engaged in studying the effect of the arsenicals given by mouth on the luetin, tuberculin and anaphylactic food tests. (Albert Strickler, Archives of Dermatology and Syphilology, August, 1921.)—Reprint from Abstracts from Recent Medical and Public Health Papers, prepared by the Div. of Ven. Dis., U. S. P. H. S.

THE JOURNAL
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The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

CARE OF THE INSANE.

Dr. C. C. Kirk contributed an excellent essay on the "History of the Care of the Insane" at the Annual Meeting of the Arkansas Medical Society in Hot Springs, which paper we published in the October issue of the Journal.

Dr. Kirk begins with the statement that Nebuchadnezzar was probably insane. He might have gone further back in biblical history, for had Cain killed his brother Abel in these days, the chances are he would have pleaded emotional insanity and obtained expert testimony to substantiate it by the usual "hypothetical question" method. Be that as it may, Dr. Kirk's excellent paper, showing extensive research, contains information of the greatest value. Perhaps comparatively few of us know that the scientific treatment of the insane dates only from the last century, prior to which time, restraint, cruelty, chains, punishment and other barbarous methods were chiefly in vogue. The result, doubtless, was to render the temporary unbalanced patient incurable and permanently insane and to make all alike unspeakably unhappy and miserable instead of, as under the present methods, ameliorating their unhappy condition.

There was a long period during which some persons were confined in mad-houses and exposed to all sorts of brutality under a system by which the mere signatures of two physicians, or even one in some cases, sufficed to secure their incarceration. It goes without saying that unscrupulous physicians could declare persons insane at the behest of scoundrels who had a financial interest in doing away with their victims, and cases are recorded in which the heirs of rich estates have been disposed of in this heartless manner. Charles Reid exposed this condition in England in one of his novels in so startling a manner that reform was promptly demanded just as Dicken's exposure of the methods of cruel superintendents of workhouses and poorhouses, brought about badly needed reforms in the treatment of another class of unfortunates.

Under scientific treatment, instead of chains and the whip, we have, not only humane methods, but by occupational therapy, by the influence of music, dancing, recreation, games and other factors, the insane not only live as human beings should live, but the temporary cases go forth cured to become again useful citizens—against a former idea that once insane one could never again be trusted at large.

The present system of arriving at a conclusion as to the insanity of those whose sanity is questioned is not faultless for, as Dr. Kirk points out, sane persons find their way into asylums and hospitals for the insane. But, although juries may err under this system, the parole and discharge plan work to liberating those who are found under scientific examination to be sane or even those mild types whose slight mental disorders offer no menace to society.

As superintendent of the Arkansas Hospital for the Treatment of Nervous Diseases, Dr. Kirk has splendid opportunities to carefully study the insane of every type, from the mildest types to those really dangerous maniacs whose conditions may be incurable, but whose daily lives are rendered as free from undue restraint as is compatible with the safety of those about them. Dr. Kirk's paper, indicating his thorough knowledge of the idiosynerasies of the insane of all types, serves to emphasize his peculiar fitness for the responsible position he holds.

Abstracts.

VALUE OF DRUGS IN UROLOGY.

A list of drugs applicable to urology was prepared by Hugh H. Young, Baltimore (Journal A. M. A., October 22, 1921), from "Useful Drugs" and "New and Nonofficial Remedies," and sent out to thirty of the best known urologists of this country. The eighteen drugs receiving the approval of 50 per cent of the urologists are: Hexamethylenamin, silver nitrate, potassium permanganate, argyrol, potassium iodid, neoarsphenamin, asprenamin, boric acid, oil of santal, protargol, mercuric chlorid, sodium acid phosphate, tincture of iodin, mercurie salicylate, balsam of Peru, glycerin, sulphate of zinc and phenol. Thirty per cent approved of twenty-five drugs. A few new drugs like mereurochrome, benzyl benzoate and benzyl alcohol were not submitted to the vote. Hexamethylenamin stands first in the list, although as usually given it is almost inert. Unless the urine is quite acid, formaldehyd is not liberated in the kidney in sufficient quantity to be germicidal or even inhibitory. Water should be drunk sparingly—the urine should not be too dilute —and acidifiers, such as acid sodium phosphate and sodium benzoate, 40 grains daily, should be taken along with large doses of hexamethylenamin (from 60 to 90 grains daily) to be of value. Silver nitrate is indispensable as being probably the most important antiseptic and caustic in chronic inflammations and ulcerations. The next two in popularity, potassium permanganate and argyrol, have been shown experimentally to be very weak antiseptics. Their value undoubtedly is due to the fact that they produce little reaction and irritation. Potassium iodid, the arsphenamins and various mercurials are essentials; but it is interesting to note that mercurie salicylate has displaced the iodids of mereury, although the aneient mercurial inunctions still rank high. The gray oil used by the British and mereurie cyanid and the benzoate, so popular in Franee, are little used in America. The rest of the list is silent testimony to the fact that the urologist is not a polypharmaeist, and that many widely heralded and much advertised preparations have not proved acceptable.

Personals and News Items.

Dr. and Mrs. D. C. Walt of Little Rock have returned from Colorado.

Dr. and Mrs. Jno. S. Jenkins of Pine Bluff visited in Little Rock this month.

Dr. E. M. Gray has moved from Barling to Vesta, near Charleston.

The State Medical Examining Board of the Arkansas Medical Society met in Little Rock November 8-9.

Dr. J. R. Wayne, of Little Rock, was chosen president of the Arkansas National Guard Association at its recent organization meeting in Little Rock.

Dr. C. H. Harwell, of Osceola, was elected one of the vice-presidents of the Tri-State Medical Association at the recent meeting in Memphis.

Dr. St. Cloud Cooper of Fort Smith was elected president of the Medical Association of the Southwest at the recent Kansas City meeting.

Dr. Leonidas Kirby of Harrison was elected Grand Master of the Most Worship-

ful Grand Lodge Free and Accepted Masons of Arkansas at their recent meeting in Little Rock.

Among the Arkansas physicians to receive Fellowship degrees in the American College of Surgeons include: Robert Caldwell, Little Rock; R. M. Blakely, Little Rock; Dewell Gann, Jr., Little Rock; A. H. Tribble, Hot Springs; Jno. F. Rowland, Hot Springs; H. A. Stroud, Jonesboro; E. E. Barlow, Dermott.

Arkansas physicians visiting in Little Rock during the past month include: C. A. Rice, Rogers; F. W. Youmans, Lewisville; Wm. Breathwit, Pine Bluff; F. L. Proctor, Forrest City; W. A. Montgomery, Atkins; W. H. Toland, Nashville; J. W. Walker, Fayetteville; J. T. Palmer, Pine Bluff, J. C. Swindle, Walnut Ridge; H. A. Ross, Arkadelphia; J. A. Bogart, Forrest City.

STATE HEALTH CONFERENCE.

The Seventh Annual Conference Local Health Officers with Venereal Disease Institute, met November 10, 11, 12, at Hot Springs. These meetings are of untold benefit to the whole State, occurring as it does at regular intervals and bringing together the health officers of the State, with their various ideas and experiences.

As shown by the program, the moral as well as the physical welfare of the State is benefited. At this meeting especial attention was given to the prevention of venereal diseases, and those versed in the educational and moral aspects of this frightful blot on our civilization, told of what had been done and the plans for future work.

Other features of the meeting were the reading of a paper by Dr. John Thames, City Health Officer, Little Rock, on "Morbidity and Mortality Reports, the Basis for Measuring Progress" and a paper by Mr. G. E. Davis, Director of the Hygienic Laboratory, Little Rock.

The people at large need to be educated along these lines and the men and women engaged in it should have the encouragement and co-operation of every progressive citizen.

"AND THE DOCTOR IS STILL WITH US."

(Presidential Address before the Medical Association of the Southwest and the Medical Society of the Missouri Valley, by Dr. E. H. Skinner of Kansas City, Thursday Evening, October 27, 1921.)

The one universally recognized agency for the eradication of disease, the cure of illness, the prevention of physical suffering and the restoration of the sick to health, is the doctor.

Coeval with the inception of science in medicine, in the dim mists of antiquity, there appeared the greedy forces of charlatanism. For 3,000 years they have attempted unremittingly to destroy true medical science—and the doctor is still with us!

Legislatures bow before the secret machinations of powerful lobbies maintained to procure the legalization of fraud which strikes at the sick and helpless. These wolves are continuously on the alert to twist a half truth or bald lie into a cunning "gas attack" which may discredit the physician or cripple his humanitarian efforts—and the doctor is still with us!

Carefully trained agitators infect every nook and corner of the nation, insidiously attempting to inoculate the unschooled mind with the virus of distrust; advertising is scattered broadcast with a wanton lavishness; highly paid experts, skilled in the gentle art of deceit, strive to instill into the public mind an unreasoning hate against the most unselfish servitors of man—and the doctor is still with us!

Despite all these campaigns waged against him, the practitioner of medicine finds himself continuously meeting with a more profound respect, a deeper appreciation, governmental recognition, military acceptance, and more enthusiastic co-operation from an enlightened and friendly citizenship. The day of our destruction recedes ever further away into the dim reaches of an indefinable future!

So don't let these petty annoyances trouble you, doctor.

Just remember that throughout the whole sweep of recorded history these manipulators of the spine, healers by faith, adjusters of bones, layers-on of hands, have sought to encompass the doom of the legitimate physician—AND THE DOCTOR IS STILL WITH US!

LIST OF MEMBERS OF THE ARKANSAS MEDICAL SOCIETY FOR THE YEAR 1921.

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Henry, R. N. — Lake Village
McGehee, E. P. — Lake Village
Parr, H. H. — Eudora
Rigdon, F. E. — Readland
Wilson, J. S. — Lake Village

CLARK COUNTY

Doane, S. N. — Arkadelphia
Kirkham, Z. L. — Okolona
McLain, C. W. — Gurdon
May, C. B. — Gurdon
Moore, J. S. — Arkadelphia
Moore, W. M. — Arkadelphia
Ross, H. A. — Arkadelphia
Ross, J. S. — Okolona
Rowland, W. T. — Arkadelphia
Townsend, Chas. K. — Arkadelphia
Townsend, N. R. — Arkadelphia
Tolleson, G. W. — Amity
Wallis, Chas. — Arkadelphia
Watson, W. S. — Amity
Wright, Chas. E. — Graysonia

CLAY COUNTY

Cunning, I. H. — Knobel
Hiller, J. P. — Pollard
Jones, F. H. — Piggott
Latimer, N. J. — Corning
Lunt, J. P. — Leonard
Lynch, Richard C. — Success
McGuire, J. E. — Piggott
Newkirk, C. H. — Corning
Richardson, M. C. — Datto
Simpson, A. R. — Corning
Smith, J. E. — Reyno
Smith, R. O. — Reyno
Thornton, E. W. — Piggott
Walker, J. F. — Success

CLEVELAND COUNTY

Hamilton, A. J. — Rison
Leali, Chas. — Kingsland
McMurtrey, J. S. — Rison
Sadler, H. D. — Rison
Wilson, H. O. — Rison

COLUMBIA COUNTY

Baker, J. J. — Magnolia
Cooksey, W. P. — Magnolia
Davis, J. H. — Waldo
Horn, W. H. — Taylor
Kitchens, H. M. — Waldo
Longino, H. E. — Magnolia
McLeod, G. F. — Magnolia
McWilliams, C. T. — Village
Smith, P. M. — Magnolia
Souter, T. E. — McNeil
Stevens, C. D. — Magnolia
Vaughan, J. T. — Emerson
Walker, J. C. — Emerson

CONWAY COUNTY

Bradley, A. R. — Morrilton
Bruce, W. H. — Morrilton
Fleming, J. T. — Springfield
Goatcher, A. L. — Plumerville
Hardison, T. W. — Morrilton
Holloway, W. R. — Center Ridge
Jackson, J. H. — Center Ridge
Jones, W. E. — Morrilton
Logan, B. C. — Morrilton
Matthews, J. M. — Morrilton
Mobley, H. E. — Morrilton

CRAIGHEAD COUNTY

Alcott, Geo. B. — Weiner
Altman, J. T. — Jonesboro
Baird, J. L. — Marked Tree
Bates, Chas. A. — Lake City
Blackwood, J. D. — Jonesboro
Brown, C. W. — Jonesboro
Clardy, Floyd — Jonesboro
Cothern, Thad — Jonesboro
Ellis, Ira W. — Monette
Grady, N. H. — Monette
Hale, C. S. — Cisco, Texas
Haltom, W. C. — Jonesboro
Harrison, B. L. — Truman
Horn, L. D. — Egypt
Horner, E. J. — Jonesboro
Howell, J. C. — Nettleton
Jackson, W. W. — Jonesboro
Lutterloh, F. W. — Jonesboro
McAdams, H. H. — Jonesboro
McCracken, C. P. — Jonesboro
McDaniel, E. C. — Tyronza
Nisbett, Frank — Brookland
Nunn, A. H. — Cash
Overstreet, W. C. — Jonesboro
Paulus, George E. — Marked Tree
Rains, H. L. — Bay
Ratcliff, R. W. — Jonesboro
Roberts, Fred — Lake City
Smith, W. H. — Bono
Smith, O. V. — Bay
Stroud, H. A. — Jonesboro
Tullos, A. M. — Truman
Waddell, G. — Lunsford
Walker, B. F. — Jonesboro
Willett, R. H. — Jonesboro

CRAWFORD COUNTY

Bennett B. L. — R. F. D. Van Buren
Blakemore, J. E. — Van Buren
Bourland, O. M. — Van Buren
Dibrell, M. S. — Van Buren
Galloway, Q. R. — Alma
Grant, S. C. — Mulberry
Hardin, Nina V. — Van Buren
Inman, Bruce — Alma
Kirkland, Saml. D. — Van Buren
Lucas, Giles, — Van Buren
Mitchell, T. M. — Fort Smith
Parchman, W. L. — Van Buren
Reves, W. R. — Alma
Sharp, J. C. — Alma
Wigley, J. A. — Mulberry

CRITTENDEN COUNTY

Burch ,W. D. — Seyppel
Hale, T. S. — Crawfordsville
Henry, Hugh B. — Hulbert
Hicks,W. P. — Earle
McVay, L. C. — Marion
Parker, A. C. — Clarksdale
Reed, F. M. — Turrell
Stevenson, B. M. — Crawfordsville
Watson, H. S. — Earle

DALLAS COUNTY

Atkinson, H. H. — Fordyce
Cheatham, H. A. — Princeton
Harrison, F. E. — Fordyce
Hope, O. W. — Fordyce
March, C. J. — Fordyce
Smith, J. Y. — Sparkman
Taylor, Marvin — Sparkman
Wilson, J. F. — Dalark

DESHA COUNTY

Cheairs, D. T. — Tillar
Cheairs, J. T. — Tillar
DeClark, W. H. — McGehee
Francis, J. W. — Arkansas City
Isom, A. — Dumas
MacCammon, Vernon — Arkansas City
Price, C. C. — Dumas
Smith, H. T. — McGehee
Watts, J. D. — Dumas
White, R. F. — McGehee

DREW COUNTY

Baker, J. P. — Blissville
Butler, E. D. — Wilmar
Collins, A. S. J. — Monticello
Cotham, E. R. — Monticello
Duckworth, F. L. — Monticello
Gates, S. M. — Monticello
Kimbro, S. O. — Monticello
Lisenbee, A. M. — Collins
O'Connor, F. J. — Monticello
Pope, M. Y. — Monticello
Smith, R. N. — Collins

FAULKNER COUNTY

Banister, B. F. — Guy
Baugh, W. F. — Conway
Benefield, C. E. — Conway
Brown, Geo. S. — Conway
Burnett, M. C. — Wooster
Cureton, H. E. — Conway
Dawson, R. L. — Wooster
Dickerson, C. H. — Conway
Downs, J. H. — Vilonia
Fraser, N. E. — Conway
Greeson, W. R. — Conway
Harrod, George — Conway
Henderson, G. L. — Conway
Huddleston, G. D. — Conway
Ingram, E. M. — Holland
Mabry, Thos. — Holland
McCollum, I. N. — Conway
McDonald, W. T. — Conway
McMahan, J. E. — Conway
Muse, J. M. — Conway
Summers, J. A. — Mayflower
Snoddy, T. B. — Conway
Voris, J. H. — Conway
Watson, T. C. — Mount Vernon
West, W. J. — El Paso
Westerfield, J. S. — Conway

FRANKLIN COUNTY

Akin, W. F. — Branch
Blackburn, E. W. — Ozark
Bollinger, W. H. — Charleston
Crocker, J. T. — Mulberry
Davis, J. H. — Jethro
Douglass, Thos. — Ozark
Gammill, S. P. — Branch
Gibbons, W. H. — Webb City
Hansberry, A. J. — Watalula
Horner, W. M. — Alix
Hudson, K. E. — Charleston
Hyden, L. N. — Hunt
King, W. J. — Houston, Texas
Neece, C. B. — Cass
Porter, W. C — Ozark
Post, J. L. — Altus
Powell, J. M. — Coal Hill
Turner, H. H. — Ozark
Williams, H. F. — Gotebo, Okla.

GARLAND COUNTY

Black, T. N. — Hot Springs
Biggs, Orvis — Hot Springs
Brewer, H. W. — Hot Springs
Burton, O. H. — Hot Springs
Brown, P. Z. — Hot Springs
Browning, E. R. — Hot Springs
Bruce, G. C. — Hot Springs
Casada, B. F. — Hot Springs
Chesnutt, Jas. H. — Hot Springs
Coffey, G. C. — Hot Springs
Connell, W. H. — Hot Springs
Collings, H. P. — Hot Springs
Dake, Chas. — Hot Springs
Davis, R. G. — Hot Springs
Deaderick, W. H. — Hot Springs
DeWoody, L. C. — Hot Springs
Diederich, V. P. — Hot Springs
Drennen, D. Edward — Hot Springs
Drennen, C. Travis — Hot Springs
Eckel, G. M. — Hot Springs
Ellis, L. R. — Hot Springs
Ellsworth, E. H. — Hot Springs
Fewks, J. M. — Hot Springs
Garratt, C. E. — Hot Springs
Greene, J. L. — Hot Springs
Hallman, V. H. — Hot Springs
Horner, J. S. — Hot Springs
Jackson, W. W. — Hot Springs
Jelks, J. T. — Hot Springs
Jennings, C. W. — Hot Springs
King, O. H. — Hot Springs
Klugh, Walter G. — Hot Springs
Lorton, T. S. — Hot Springs
McConnell, C. A. — Hot Springs
McKenzie, E. M. — Hot Springs
Minor, J. C. — Hot Springs
Minnich, Wm. C. — Hot Springs
Mount, M. F. — Hot Springs
Nims, C. H. — Hot Springs
Lautman, M. F. — Hot Springs
Laws, W. V. — Hot Springs
Pate, C. N. — Hot Springs
Porter, Wm. F. — Hot Springs
Proctor, J. M. — Hot Springs
Purdom, E. A — Hot Springs
Randolph, J. P. — Hot Springs
Roberts, C. M. — Hot Springs
Rowland, J. F. — Hot Springs
Sanders, T. E. — Hot Springs
Sharp, S. B. — Hot Springsg
Short, Z. N. — Hot Springs
Simpson, W. F. — Hot Springs
Smith, E. R — Hot Springs
Smith, J. H. — Hot Springs
Smith, W. K. — Hot Springs
Snyder, W. L. — Hot Springs
Steel, S. B. — Hot Springs
Stell, J. S. — Hot Springs
Stough, D. B. — Hot Springs
Strachan, J. B. — Hot Springs
Sullivan, A. G. — Hot Springs
Tarkington, Grayson E. — Hot Springs
Thompson, E. L. — Hot Springs
Thompson, Loyd — Hot Springs
Thompson, M. G. — Hot Springs
Tillotson, C H. — Hot Springs
Tribble, A. H. — Hot Springs
Vaughan, P. T. — Hot Springs
Wade, H. K. — Hot Springs
Weil, S. D. — Hot Springs
Wilkins, J. S. — Hot Springs
Williams, A. U — Hot Springs
Williams, F. M. — Hot Springs
Winegar, E. F. — Hot Springs
Wootton, W. T. — Hot Springs

GRANT COUNTY

Blakely, M. M. — Sheridan
Butler, J. L. — Sheridan
Capel, C. B. — Grape Vine
Cole, C. E. — Prattsville
Goodman, J. M. — Sheridan
Jones, J. E. — Sheridan
Kelly, O. R. — Sheridan
Paxton, Robt. L. — Leola

GREENE COUNTY

Baker, E. S. — Paragould
Boyd, D. L. — Paragould
Bridges, G. P. — Paragould
Castleberry, F. L. — Paragould
Clopton, O. H. — Marmaduke
Cohen, Geo. — Piggott
Dickson, P. L. — Paragould
Dillman, James A. — Paragould

GREENE COUNTY—Continued.

Ellington, W. E. — Paragould
Ellis, B. E. — Greenway
Haley, R. J. — Paragould
Hardesty, C. A. — Paragould
Hopkins, G. T. — Paragould
Hudgins, J. J. — Marmaduke
Hutcherson, R. L. — Delaplaine
Hutchins, W. P. — Walcott
Kennedy, E. L. — Marmaduke
Lamb, J. H. — Paragould
Majors, Wm. M. — Paragould
McKenzie, J. G. — Paragould
Owens, W. R. — Glendale, Calif.
Scott, F. M. — Paragould

HEMPSTEAD COUNTY

Allison, Walter G. — Hope
Autry, J. R. — Columbus
Bell, Wm. E. — Houston, Texas
Cannon, G. E. — Hope
Carrigan, P. B. — Hope
Farrow, W. D. — Hope
Garner, W. M. — Hope
Kelly, John L. — Hope
Kolb, A. C. — Hope
Lile, L. M. — Hope
Robbins, W. F. — Ozan
Russell, M. V. — Hope
Saner, W. F. — Hope
Smith, Don — Hope
Stidham, J. H. — Hope
Waddle, J. S. — Hope
Weaver, J. H. — Hope

HOT SPRING COUNTY

Berry, Major, M. C. — Camp Pike
Bramlitt, E. T. — Malvern
Cox, J. A. — Donaldson
Hodges, W. G. — Malvern
McCray, E. H. — Malvern
Norton, J. M. — Friendship
Phillips, R. Y. — Malvern
Prickett, Chas. — Malvern
Williams, J. M. — Malvern

HOWARD COUNTY

Alford, T. F. — Murfreesboro
Gibson, W. M. — Nashville
Hale, A. W. — Nashville
Hopkins, J. S. — Nashville
Toland W. H. — Nashville

INDEPENDENCE COUNTY

Baldwin, W. S. — Cotter
Bone, O. L. — Newark
Burge, H. G. — Sulphur Rock
Burge, T. G. — Judsonia
Case, J. W. — Batesville
Craig, M. S. — Batesville
Dorr, R. C. — Batesville
Evans, A. A. — Newark
Evans, L. T. — Mt. Pleasant
Gray, C. C. — Batesville
Gray, F. A. — Batesville
Hinkle, Chas. G. — Batesville
Huskey, J. M. — Moorefield
Jeffrey, Paul H. — Bethesda
Johnston, O. J. T. — Batesville
Kennerly, J. H. — Batesville
Kent, B. J. — Oil Trough
King, K. W. — Floral
Lawrene, W. B. — Batesville
McAdams, V. D. — Cord
Moore, W. P. — Little Rock
Pascoe, V. L. — Newark
Robertson, S. N. — Sulphur Rock
Rodman, T. N. — Newark
Roe, J. B. — Newark
Smith, H. H. — Calico Rock
Woods, O. S. — Salem
Woods, T. J. — Evening Shade
Wyatt, W. A. — Rosie

JACKSON COUNTY

Barr, A. F. — Weldon
Best, A. L. — Newport
Boyd, F. M. — Antlers, Okla.
Causey, G. A. — Swifton
Elton, A. M. — Newport
Erwin, I. H. — Newport
George, C. E. — Grubbs
Gray, C. R. — Newport
Ivy, J. B. — Tuckerman
Jamison, O. A. — Tuckerman

JACKSON COUNTY—Continued

Jones, O. E. ..... Newport
Kimberlin, K. K. ..... Tuckerman
Owens, M. B. ..... Sulphur Rock
Simpson, W. S. ..... Algoa
Slayden, L. T. ..... Tuckerman
Stephens, G. K. ..... Newport
Thomason, Wm. T. ..... Newport
Walker, H. O. ..... Newport
Watson, E. L. ..... Newport
Wilson, W. F. ..... Elmo

JEFFERSON COUNTY

Blankenship, W. H. ..... Pine Bluff
Breathwit, Wm. ..... Pine Bluff
Caruthers, C. K. ..... Pine Bluff
Crump, J. F. ..... Pine Bluff
Davidson, J. S. ..... Pine Bluff
Gill, J. F. ..... Pine Bluff
Glover, C. A. ..... Pine Bluff
Hankinson, O. C. ..... Pine Bluff
Hughes, A. A. ..... New Gascony
Jenkins, J. S. ..... Pine Bluff
John, J. W. ..... Pine Bluff
Jordan, A. C. ..... Pine Bluff
Lemons, J. M. ..... Pine Bluff
Lowe, W. T. ..... Pine Bluff
Luck, B. D. ..... Pine Bluff
McMullen, E. C. ..... Pine Bluff
Palmer, J. T. ..... Pine Bluff
Pittman, W. G. ..... Pine Bluff
Ramey, Clyde ..... Sherrill
Rowell, F. C. ..... Pine Bluff
Scales, J. W. ..... Pine Bluff
Shelton, M. A. ..... Wabbaseka
Spillyards, J. S. ..... Pine Bluff
Troupe, A. W. ..... Pine Bluff
Vines, C. L. ..... Pine Bluff
Withers, J. W. ..... Pine Bluff
Wood, R. P. ..... Altheimer
Woodul, T. W. ..... Pine Bluff

JOHNSON COUNTY

Barger, M. I. ..... Lamar
Boen, A. L. ..... Clarksville
Bradley, John F. ..... Lamar
Burgess, M. E. ..... Clarksville
Burgess, T. E. ..... Clarksville
Graves, S. M. ..... Mt. Levi
Gray, L. C. ..... Clarksville
Hardgrave, G. L. ..... Clarksville
Hays, Anna ..... Clarksville
Hunt, E. H. ..... Clarksville
Hunt, Wm. R. ..... Clarksville
Kolb, J. S. ..... Clarksville
Manley, R. N. ..... Clarksville
Mooney, J. D. ..... Clarksville
Price, C. T. ..... Hartman

LAFAYETTE COUNTY

Baker, F. E. ..... Stamps
Benton, J. B. ..... Stamps
Hoover, A. S. ..... Stamps
Kitchens, W. L. ..... Stamps
McKnight, J. F. ..... Bradley
Youmans, F. W. ..... Lewisville

LAWRENCE COUNTY

Ball, C. C. ..... Ravenden
Clay, A. J. ..... Hoxie
Guthrie, R. H. ..... Smithville
Guthrie, T. C. ..... Smithville
Hatcher, Wright ..... Imboden
Henderson, A. G. ..... Imboden
Hughes, J. C. ..... Hoxie
Johnson, Wm. ..... Hardy
Land, J. C. ..... Walnut Ridge
McCarroll, H. R. ..... Walnut Ridge
Morris, J. W. ..... Pima, Ariz.
Neece, T. C ..... Walnut Ridge
Poindexter, J. C. ..... Imboden
Ponder, E. T. ..... Little Rock
Robinson, W. J. ..... Portia
Rudy, D. B. ..... Smithville
Stephens, J. M. ..... Hoxie
Swindle, J. C. ..... Walnut Ridge
Thomas, Earl ..... Hoxie
Townsend, C. C. ..... Walnut Ridge
Warren, G. A. ..... Black Rock
Watkins, G. M. ..... Walnut Ridge

LEE COUNTY

Bean, W. B. ..... Marianna
Beaty, W. S. ..... Vineyard
Bogart, H. D. ..... Marianna
Chaffin, C. W. ..... Moro

LEE COUNTY—Continued.

Crawford, W. S. ..... Marianna
Hughey, M. C. ..... Marianna
Longley, W. W. ..... Marianna
McLendon, Mac ..... Marianna
Russwurm, S. C. ..... LaGrange
Wall, E. D. ..... Marianna
Williamson, O. L. ..... Marianna
Wilsford, A. L. ..... Moro

LINCOLN COUNTY

Clark, J. M. ..... Gould
Colquitt, S. W. ..... Grady
Corney, R. B. ..... Little Rock
Dixon, Chas. W. ..... Douglas
Tarver, B. F. ..... Star City
Thiolliere, A. C. ..... Varner
Wood, G. C. ..... Grady

LITTLE RIVER COUNTY

Castile, Herman ..... Foreman
Marr, S. C. ..... Ashdown
Phillips, P. H. ..... Ashdown
Ringgold, J. W. ..... Ashdown
Vaughan, W. E. ..... Richmond
York, W. W. ..... Ashdown

LOGAN COUNTY

Armstrong, N. E. ..... Booneville
Bennett, W. H. ..... Paris
Foster, M. E. ..... Paris
Harkins, R. A. ..... Ratcliff
Hederick, A. R. ..... Booneville
Keck, H. M. ..... Paris
Lipe, E. N. ..... Paris
McConnell, S. P. ..... Booneville
Smith, A. M. ..... Paris
Smith, J. J. ..... Paris
Stewart, John ..... Booneville
Thompson, R. C. ..... Paris

LONOKE COUNTY

Beaty, S. S. ..... England
Benton, T. E. ..... Lonoke
Brewer, John F. ..... Kerr
Butler, O. C. ..... England
Callahan, A. E. ..... Carlisle
Corn, F. A. ..... Lonoke
Crowgey, W. B. ..... Scott
Cunning, John R. ..... Lonoke
Doyne, C. R. ..... Madison, Ind.
Elliott, J. E. ..... Carlisle
Granberry, G. W. ..... Cabot
Harris, E. H. ..... England
Kelly, M. D. ..... Lonoke
Scruggs, G. W. ..... Humnoke
Southall, S. A. ..... Lonoke
Street, H. N. ..... Lonoke
Taylor, Ira S. ..... Cabot
Thibault, H. ..... Scott
Ward, O. D. ..... England
Watson, A. C. ..... England
Wells, J. B. ..... Scott

MADISON COUNTY

Callen, C. B. ..... Huntsville
Callen, L. H. ..... Huntsville
Youngblood, F. ..... Huntsville

MILLER COUNTY

Beck, E. L. ..... Texarkana
Buchanan, E. B. ..... Artex
Chace, A. E. ..... Texarkana
Collum, S. A. ..... Texarkana
Dale, J. R. ..... Texarkana
Dale, R. R. ..... Texarkana
Fuller, T. E. ..... Texarkana
Grant, R. L. ..... Texarkana
Hibbitts, Wm. ..... Texarkana
Hunt, Preston ..... Texarkana
Kelly, K. M. ..... Texarkana
Kittrell, T. F. ..... Texarkana
Kosminsky, L. J. ..... Texarkana
Lanier, L. H. ..... Texarkana
Laws, S. C. ..... Texarkana
Lee, A. G. ..... Texarkana
Lennard, F. M. ..... Texarkana
Lightfoot, J. A. ..... Texarkana
Mann, R. H. T. ..... Texarkana
Middleton, B. C. ..... Texarkana
Montgomery, S. K. ..... Texarkana
Moulton, J. S. ..... Texarkana
Murry, H. E. ..... Texarkana
Smiley, H. H. ..... Texarkana
Smith, J. K. ..... Texarkana

MILLER COUNTY—Continued.

Webster, H. R. ..... Texarkana
White, J. N. ..... Texarkana
Wigner, W. H. ..... Texarkana

MISSISSIPPI COUNTY

Barksdale, Oscar ..... Wilson
Chambers, M. E. ..... Jennie
Crawford, H. F. ..... Wilson
Ellis, W. B. ..... Keiser
Hamner, J. H. ..... Marie
Harwell, C. M. ..... Osceola
Hill, E. V. ..... Yarbro
Howton, O. ..... Osceola
Hudson, T. F. ..... Luxora
Johnson, I. R. ..... Bassett
Johnson, R. L. ..... Bassett
Lowry, S. A. ..... Luxora
McCall, W. S. ..... Blytheville
Nall, Robt. P. ..... Armorel
Saliba, J. A. ..... Blytheville
Sanders, J. E. ..... Blytheville
Sheddan, W. J. ..... Osceola
Smith, F. D. ..... Blytheville
Stacey, A. J. ..... Burdette
Stevens, C. C. ..... Blytheville
Wilson, C. E. ..... Blytheville

MONROE COUNTY

Boswell, W. L. ..... Clarendon
Bradley, W. T. ..... Monroe
Darnall, Ernest ..... Holly Grove
Houston, Matt. F. ..... Clarendon
McKnight, C. H. ..... Brinkley
McKnight, E. D. ..... Brinkley
Miller, J. C. ..... Blackton
Murphy, F. T. ..... Brinkley
Murphy, N. E. ..... Clarendon
Phipps, J. H. ..... Roe
Reagan, G. W. ..... Clarendon
Stout, L. H. ..... Brinkley
Stout, T. J. ..... Brinkley
Terry, P. E. ..... Blackton
Thomas, P. E., Sr. ..... Clarendon

NEVADA COUNTY

Buchanan, A. S. ..... Prescott
Buchanan, G. A. ..... Prescott
Chastain, J. S. ..... Prescott
Cox, J. E. ..... Emmet
Hesterly, J. B. ..... Prescott
Hesterly, S. J. ..... Prescott
Hirst, O. G. ..... Prescott
McDaniel, T. O. ..... Boughton
Mendenhall, T. J. ..... Rosston
Pool, W. B. H. ..... Bodcaw
Reeder, A. A. ..... Prescott
Rice, W. W. ..... Prescott
Whaley, E. S. ..... Emmet

OUACHITA COUNTY

Byrd, E. J. ..... Millville
Davison, A. ..... Camden
Early, C. S. ..... Camden
Henry, H. H. ..... Eagle Mills
Jameson, J. B. ..... Camden
Powell, B. V. ..... Camden
Purifoy, W. A. ..... Chidester
Rinehart, J. S. ..... Camden
Thompson, H. F. ..... Bearden
Thompson, S. A. ..... Buena Vista

PERRY COUNTY

Howard, M. E. ..... Perryville
Jones, R. A. ..... Houston
McNeil, M. P. ..... Little Rock
Matthews, E. L. ..... Casa
Reiff, W. L. ..... Perryville
Tucker, G. E. ..... Bigelow

PHILLIPS COUNTY

Altman, C. G. ..... Helena
Bean, J. W. ..... Marvell
Brooks, G. A. ..... Turner
Brown, E. T. ..... Lexa
Bruce, W. B. ..... Marvell
Butts, J. W. ..... Helena
Cox, Allen E. ..... Helena
Cox, Aris W. ..... Helena
Eubanks, G. W. ..... Wabash
Ellis, J. B. ..... Helena
Fink, M. ..... Helena
Hall, L. ..... Turner
Henry, Morris ..... Helena

PHILLIPS COUNTY—Continued.

Holtzclaw, J. W.....Marvell
Johnson, P. E.....Houston, Tex.
King, J. A.....Mellwood
King, W. C.....Helena
Kultgen, Edward.....Elaine
Lee, H. W. A.....West Helena
Leslie, T. E.....Memphis, Tenn.
Nichols, J. W.....Helena
Orr, W. R.....Helena
Parker, Ollie.....Elaine
Rembert, J. C.....Helena
Rightor, H. II.....Helena
Russwurm, W. C.....Helena
Thompson, H. M.....Marvell
Trotter, C. H.....Helena

POLK COUNTY

Fletcher, T. M.....Mena
Hawkins, B. H.....Mena
Hilton, J. G.....Mena
Johnson, C. F.....Hatfield
Mullins, F. C.....Grannis
Watkins, P. R.....Mena

POPE COUNTY

Berryman, L. D.....Russellville
Campbell, J. M.....Russellville
Drummond, H. S.....Russellville
Haney, A. C.....Atkins
Hays, J. F.....Russellville
Jones, G. W.....Moreland
Linzy, J. R.....Russellville
Linton, A .C.....Hector
Montgomery, W. A.....Atkins
Powell, J. W.....Russellville
Rye, A. W.....London
Smith, R. L.....Russellville
Stanford, J. M.....Russellville
Wright, Jerome.....Russellville

PRAIRIE COUNTY

Ellis, C. S.....Hazen
Gilliam, J. C.....Des Arc
Gipson, Wm. M.....Des Arc
Hipolite, F. A.....Devall's Bluff
Kirtley, J. R., R.F.D. 1.....Stuttgart
Lynn, J. R.....Hazen
Parker, James.....Devalls' Bluff
Porter, T. G.....Hazen

PULASKI COUNTY

Arkebauer, C. A.....Little Rock
Bailey, W. E.....Little Rock
Barlow, M. J.....North Little Rock
Bathurst, W. R.....Little Rock
Bentley, C. E.....Little Rock
Blakely, R. M.....Little Rock
Bond, S. P.....Little Rock
Browning, H. W.....Little Rock
Calcote, R. J.....Little Rock
Caldwell, R.....Little Rock
Carruthers, F. W.....Little Rock
Crawford, S. R.....Little Rock
Chesnutt, C. R.....Little Rock
Cunningham, J. C.....Little Rock
Cunningham, J. W.....Little Rock
Daly, M. G.....Little Rock
Darnall, R. F.....Little Rock
Day, E. O.....Little Rock
Davis, E. N.....Little Rock
Davis, J. C.....Little Rock
Dibrell, J. L.....Little Rock
Dibrell, J. R .....Little Rock
Dickinson, M. F.....Little Rock
Dooley, J. B.....Little Rock
Dunaway, W. C.....Little Rock
Estes, S. J.....Little Rock
Eubanks, R. M.....Little Rock
Fly, T. M.....Little Rock
Freedman, Theo.....North Little Rock
French, F. L.....Little Rock
Gann, Dewell, Jr.....Little Rock
Garrison, C .W.....Little Rock
Gray, Oscar.....Little Rock
Gray, W. E.....Little Rock
Hardeman, D. R.....Little Rock
Harris, A. E.....Little Rock
Higgins, Homer A.....Little Rock
Hinkle, S. B.....Little Rock
Hodges, E. E.....Little Rock
Hoge, S. F.....Little Rock
Holmes, G. M.....Little Rock
Howell, A. R.....North Little Rock
Hudson, E. M.....Little Roek
Humphreys, Lincoln .....Washington, D. C.

PULASKI COUNTY—Continued.

Hughes, W. B.....Little Rock
Hurrle, F. E.....Little Rock
Jackson, Geo. F.....Little Rock
Jewell, I. H.....Paris
Jobe, A. L.....Little Rock
Jones, H. F. H.....Little Rock
Jones, W. E.....Little Rock
Johnston, E. E.....Little Rock
Judd, O. K.....Little Rock
Kirby, H. H.....Little Rock
Kirk, C. C.....Little Rock
Kory, R. C.....Columbus, Neb.
Kriesel, W. A.....Little Rock
Lamb, W. A.....Little Rock
Law, Ralph A.....Little Rock
Lenow, Jas. H.....Little Rock
McKinney, A. T.....North Little Rock
McCaskill, M. E.....Little Rock
McCormack, G. A.....Little Rock
McCurry, W. T.....Little Rock
McGill, A. G.....Little Rock
McRae, W. M.....Little Rock
Mahoney, P. L.....Little Rock
Manglesdorf, W. F.....Little Rock
May, W. S.....Little Rock
Meek, E.....Little Rock
Miller, W. H.....Little Rock
Murphey, Pat.....Little Rock
Moore, R. B.....Little Rock
Oates, Charles E.....Little Rock
Ogden, M. D.....Little Rock
Parmley, L. V.....Little Rock
Patterson, R. Q.....Little Rock
Prothro, H.....North Little Rock
Prothro, E. W.....Little Rock
Pemberton, E. M.....Little Rock
Pettus, C. S.....Little Rock
Reagan, L. D.....Little Rock
Reed, C. C.....Little Rock
Rhinehart, D. A.....Little Rock
Riegler, N. W.....Little Rock
Rose, W. D.....Little Rock
Robinson, F. C.....Little Rock
Runyan, J. P.....Little Rock
Sadler, W. L.....Little Rock
Saxon, R. L.....Little Rock
Scarborough, J. I.....Little Rock
Scott, C. V.....Little Rock
Scott, Homer.....Little Rock
Scroggins, J. H.....Little Rock
Sheppard, J. P.....Little Rock
Shipp, A. C.....Little Rock
Shinault, C. R.....Little Rock
Smith, Morgan.....Little Rock
Smith, W. F.....Little Rock
Snodgrass, W. A.....Little Rock
Stover, A. R.....Little Rock
Strauss, A. W.....Little Rock
Stroupe, H. V.....Empalme, Sonora, Mex.
Switzer, D. M.....North Little Rock
Thames, John H.....Little Rock
Thomas, P. E , Jr.....Little Rock
Thompson, G. D.....Little Rock
Vaughan, Milton.....Little Rock
Villars, H. F.....Little Rock
Vinsonhaler, F.....Little Rock
Wagley, P. V.....Dierks
Walt, D. C.....Little Rock
Watkins, Anderson.....Little Rock
Watkins, John G.....Little Rock
Wayman, A. K.....Little Rock
Wayne, J. R.....Little Rock
White, L. W.....Little Rock
Wilkes, E. H.....Little Rock
Wilson, Olive.....Paragould
Witt, Ben M.....Little Rock
Witt, C. E.....Little Rock
Zell, A. M.....Little Rock

RANDOLPH COUNTY

Brown, J W.....Pocahontas
Finney, Clarence.....Biggers
Hamil, W. E.....Pocahontas
Hughes, W. E.....Pocahontas
Hull, H. B.....Ravenden Springs
Johnston, J. J.....Biggers
Johnson, T. Z.....Walnut Ridge
Johnson, R. R .....Walnut Ridge
Loftis, Jno. R.....Maynard
Schide, Carl .....Pocahontas
Throgmorton, H. L.....Pocahontas

SALINE COUNTY

Buckley, E. A.....Bauxite
Crawford, J. B.....Benton
Davis, W. S.....Owensville
Gann, Dewell, Sr.....Benton
Gwaltney, B.....Haskell

SALINE COUNTY—Continued.

Hutchison, S. N.....Los Angeles, Calif.
Kelly, Warren.....Benton
Melton, J. W.....Benton
Phillips, J. M.....Benton
Steed, C. J.....Alexander
Vines, F. P.....Bauxite
Walton, J. W.....Benton
Ward, W. W.....Alexander
Wright, J. D.....Mabelvale

SCOTT COUNTY

Bevill, C.....Waldron
Cole, J. H.....Boothe
Crow, M. T.....Waldron
Duncan, F. R.....Waldron
Duncan, L. D.....Waldron
Jones, Paul.....Blue Ball
Jones, W. A.....Hon
Williams, E. B.....Black Fork

SEARCY COUNTY

Baker, A. S.....Snowball
Cotton, J. O.....Leslie
Cypert, J. L.....Rock Springs
Dickens, G. W.....Leslie
Drewry, Jas. H.....Witt Springs
Daniel, S. G.....Marshall
Fendley, E. G.....Leslie
Goggan, R. E. B.....St. Joe
Hamm, S. G.....Bass
Henly, J. A.....St. Joe
Heard, W. W.....Watts
Melton, A. S.....Marshall
Moore, W. T .....Gilbert
Roberts, E. E.....Gilbert
Rogers, W. F.....St. Joe
Ruff, S. P.....Marshall
Wood, E. W.....Marshall

SEBASTIAN COUNTY

Belcher, A. C .....South Richmond, Va.
Benefield, J. H.....Huntington
Blair, A. A.....Fort Smith
Brooksher, S. L.....Fort Smith
Brooksher, W. R.....Fort Smith
Brooksher, W. R., Jr.....Fort Smith
Brown, E. J .....Fort Smith
Buckley, J. H.....Fort Smith
Bungart, C. S.....Fort Smith
Butler, V. V.....Hartford
Cooper, St. Cloud .....Fort Smith
Davenport, C. P.....Hartford
Dorente, D. R.....Fort Smith
Dorsey, H. C.....Fort Smith
Eberle, J. G.....Fort Smith
Eberle, Walter G.....Fort Smith
Epler, E. G.....Fort Smith
Foltz, Jas. A.....Fort Smith
Foster, J. H.....Fort Smith
Foster, M. E.....Fort Smith
Freer, B. W.....Fort Smith
Gardner, D. M.....Fort Smith
Goldstein, D. W.....Fort Smith
Gray, E. M.....R. 5, Vesta
Hall, C. W.....Greenwood
Hampson, J. K.....Fort Smith
Harrod, R. T.....Dalworth Park, Tex.
Harvey, Jno. H.....Fort Smith
Hoge, A. F.....Fort Smith
Holt, C S.....Fort Smith
Hunt, W. J.....Hartford
Hynes, Geo. F.....Fort Smith
Johnson, D. T.....Fort Smith
Johnson, Hugh.....Fort Smith
Johnson, J. E.....Fort Smith
Jones, E. B.....Hartford
King, H. C.....Fort Smith
Klingensmith, W. R.....Fort Smith
McGinty, John.....Fort Smith
McKelvey, A. A.....Fort Smith
Means, C. S.....Jenny Lind
Moulton, E. C.....Fort Smith
Moulton, H.....Fort Smith
Parks, R. F.....Fort Smith
Riddler, P. A.....Fort Smith
Rose, Willis F.....Fort Smith
Ryan, I. A.....Fort Smith
Sims, H. J.....Fort Smith
Slocumb, L. H.....Fort Smith
Smith, H. H .....Fort Smith
Southard, J. D.....Fort Smith
Taylor, J. M.....Fort Smith
Thompson, H. B.....Fort Smith
Ware B. L.....Greenwood
Wilson, Cons P.....Fort Smith

SEBASTIAN COUNTY—Continued.

Wolferman, S. J.	Fort Smith
Woods, G .G.	Fort Smith
Wyatt, R. B.	Fort Smith

SEVIER COUNTY

Anderson, J. B.	Ben Lomond
Archer, C. A.	DeQueen
Baird, W. G.	Dierks
Clingan, A. J.	Lockesburg
Dickinson, R. C.	Horatio
Graves, J. C.	Lockesburg
Guthrey, J. E.	Ben Lomond
Hendrix, B. E.	Gillham
Hopkins, R. L.	DeQueen
Kennedy, J. R.	DeQueen
Kitchens, C. E.	DeQueen
Musser, Jas. F.	Calvin, Okla.
Norwood, F. A.	Lockesburg
Norwood, M. L.	Lockesburg

ST. FRANCIS COUNTY

Alley, W. H.	Forrest City
Bogart, J. A.	Forrest City
Boggan, P. P.	Forrest City
Caldwell, A. B.	Caldwell
McCown, N. C.	Forrest City
McDougall, J. F.	Forrest City
Pelton, D. A.	Forrest City
Powell, Clyde V.	Round Pond
Proctor, F. L.	Forrest City
Purnell, R. L.	Madison
Rush, J. O.	Forrest City
Summerford, T. D.	Widener
Winters, W. A.	Widener

UNION COUNTY

Cathey, A. D.	El Dorado
Elkins, W. N.	Junction City
Irby, F. L.	Wesson
Jarrell, Foster	Huttig

UNION COUNTY—Continued.

McGraw, S. J.	El Dorado
McKinney, A. B.	Cargile
Mahoney, F. O.	El Dorado
Mayfield, A. M.	El Dorado
Miles, W. L.	El Dorado
Mitchell, J. G.	El Dorado
Moore, J. A.	El Dorado
Murphy, Geo. D.	El Dorado
Murphy, G. W. T.	Strong
Niehuss, H. H.	El Dorado
Nolan, J. W.	El Dorado
Purifoy, L. L.	El Dorado
Wharton, J. B.	El Dorado
White, D. E.	El Dorado

WASHINGTON COUNTY

Batchelder, F. P.	Farmington
Bearden, J. M.	Springdale
Brewster, J. H.	Prairie Grove
Cannon, J. S.	West Fork
Ellis, E. F.	Fayetteville
Gregg, S. A.	Fayetteville
Harr, H. T.	Fayetteville
Hathcock, P. L.	Lincoln
Henry, R. T.	Springdale
Layson, Z. C.	Fayetteville
McCormick, E. G.	Prairie Grove
Martin, J. E.	Springdale
Miller, Otey	Fayetteville
Morrow, F. R.	Fayetteville
Moore, A. I.	Fayetteville
Mock, W. H.	Prairie Grove
Paddock, C. B.	Fayetteville
Southworth, Jas. R.	Fayetteville
Swift, Chas. E.	Elkins
Walker, J. W.	Fayetteville
Wood, H. D.	Fayetteville

WHITE COUNTY

Abington, E. H.	Beebe
Abington, W. H.	Beebe
Alibright, S. J.	Kensett
Brewer, T. E.	Antioch
Clark, W. A.	Bald Knob
Cleveland, J. C.	Bald Knob
Felts, W. R.	Judsonia
Hardy, F. P.	Rosebud
Harrison, A. G.	Searcy
Hassell, J. W.	Searcy
Hudgins, A. H.	Griffithville
Jelks, J. M.	Searcy
Jones, J. L.	Searcy
McAdams, J. C.	Pangburn
Moore, L. E.	Searcy
Peeler, C. M.	Pangburn
Runyan, J. R.	Searcy
Sloan, Dewey W.	Beebe
Tapscott, S. T., Jr.	Searcy

WOODRUFF COUNTY

Biles, L. E.	Augusta
Bradford, T. B.	Cotton Plant
Brewer, E. F.	Augusta
Brewster, B.	McCrory
Brown, E. B.	Cotton Plant
Dungan, C. E.	Augusta
Fraser, R. L.	McCrory
Gephart, R. T.	Cotton Plant
Maguire, F. C.	Gregory
Monroe, U. S.	Hunter
Morris, J. W.	De View
Osborn, J. M.	Howell
Smith, R. N.	Augusta
West, J. H.	Grays

YELL COUNTY

Linzy, C. B.	Plainview
Montgomery, H. L.	Gravelly

STOMATITIS AND APLASTIC ANEMIA DUE TO NEOARSPHENAMIN.

Moore and Keidel present eomplete history of a patient who developed a fatal aplastie anemia after neoarsphenamin. The literature reveals only three reports of similar eases, aside from those already reported from this clinic (Syphilis Department of the Medical Clinic, Johns Hopkins Hospital). Authors believe that reactions of this type are by no means so rare as the few reports in the literature would indicate. While authors have nothing to offer regarding the treatment of these reactions, a means for their early recognition on the basis of the blood picture represents a definite step toward the prevention of the more severe forms. Damage to the bone marrow, as indicated by changes in the blood picture, is also present in the majority of patients reacting to arsenical drugs, with a rash of the exfoliative dermatitis groups, and these blood changes differ only in degree from the maximally severe reaction, as seen in this case.

In a previous paper stress was laid on the reeognition of the prodromal symptoms of reactions of this group. Further observation and a study of the blood have revealed a slight decrease in neutrophile cells, eosinophilia from 5 of 8 per cent, a slight increase in the large mononuclear transitional group and the presence of numerous fragile leukoeytes. The necessity for caution in further treatment was thus strongly emphasized. (Joseph Earle Moore and Albert Kreidel, Arehives of Dermatology and Syphilology, August, 1921.)

Practicing physicians, who are the first line of defense against preventable diseases, are faced with the same moral responsibility as the State Board of Health to offer a proper defense against these diseases, and both should co-operate to overcome, so far as possible, this great loss of human life. The physicians of Arkansas ean be of inestimable service, and can place the eommunity under greater debt to them if they will assist the Board in the following ways:

1. By promptly reporting all eases of communieable disease.

2. By reporting at onee all cases in which the presence of a eommunicable disease is diagnosed or suspected. It is during the early period of the aeute infectious diseases, when the symptoms are not yet pronouneed, that they are most readily communicable. If a case is reported on mere suspicion, which subsequent developments fail to justify, the Board will co-operate by removing all restrietions which may have been placed upon it, upon presentation and confirmation of the facts.

District Medical Society.

FIRST COUNCILOR DISTRICT MEDICAL SOCIETY OF ARKANSAS.

(By W. C. Overstreet, Secretary.)

The First Councilor District Medical Society met in regular semi-annual session November 9, 1921. The meeting was to be held in the Y. M. C. A., but owing to the small attendance at the morning session, the business and scientific part of the program was held in the afternoon in Link's banquet room immediately after luncheon. The wives of the doctors were invited to attend the luncheon and there was an almost perfect attendance of the ladies. Among the guests from out of town were: Mrs. O. V. Smith of Bay, and Mrs. J. C. Howell of Nettleton. Dr. Thad Cothern acted as toastmaster and behaved in his usual jovial manner. After-dinner speeches were made by Drs. Smythe, Burns, Warren and others and we heard from several of the ladies on the strenuous life of a doctor's wife.

Immediately after luncheon was the scientific program. The first paper was by Dr. Frank D. Smythe on "Clinical Experiments with Synergistic Analgesia." This paper was quite lengthy, but highly interesting throughout, and was based on Gwathmey's report in a recent issue of the Journal of the A. M. A., supplemented with Dr. Smythe's own cases. The main point was the use of 200 cc. of 4 per cent Magnesium Sulphate by hypodermoclysis two hours before operation, followed by one-eighth grain of morphine in a half hour, same dose of morphine repeated in a half hour with 1/150 of atropine, and a third dose of morphine the same size is given if the patient is not pretty thoroughly narcotized at the end of the hour and a half. With this preliminary treatment, it is claimed that major operations can be performed on a very small amount of ether, patient remaining pink throughout the operation, and post-operative analgesics are unnecessary till six to eight hours have elapsed; and, in some cases are dispensed with entirely. The fact was also brought out in this paper that almost complete analgesia (for use in inoperable cases and non-surgical cases) could be produced with a subcutaneous injection of a quarter grain of morphine in 2 cc. of a twenty-five per cent (25%) solution of magnesium sulphate, lasting from twenty-four to thirty-six hours. The discussion of this paper was quite general, and Dr. Smythe closed answering the questions and criticisms in an able manner.

The next paper was by Dr. Wm. Britt Burns on "The Element of Time; Its Importance in Surgical Procedures." This paper was rather brief but straight to the point and of great benefit to all who heard it. He emphasized the prevention of shock by accurate, but expeditious work.

The last paper of the program was by Dr. G. A. Warren, former President of our State Society, whose subject was: "The Dangers of Pituitrin." Every one present took part in the discussion and there was a divided opinion as to whether pituitrin was a very dangerous agent of limited use, or of universal use and a boon to the obstetrician. Dr. Warren closed the discussion and this ended the scientific program.

Election of officers, 1922, closed the session and the following were chosen:

President, P. W. Lutterloh, of Jonesboro.

Vice-President, O. V. Smith, of Bay.

Secretary-Treasurer, W. C. Overstreet, of Jonesboro.

The meeting adjourned till the next regular meeting in Jonesboro, May, 1922.

County Societies.

GREENE COUNTY.

(By F. M. Scott, Secretary.)

The Greene County Medical Society met in regular session November 3 at Paragould. Dr. Dillman presiding.

Present: Dickson, Dillman, Hopkins, Lamb, Wilson, Baker, Bridges and Scott. Dr. Dickson conducted a very interesting quiz on vascular conditions, finishing up a study of cardio-vascular and renal diseases.

Mrs. Dr. A. G. Clyne, of Bethel, died suddenly a few days ago.

Annual election of officers will be taken up at our December meeting.

LAWRENCE COUNTY.

(By H. R. McCarroll, Secretary.)

The Lawrence County Medical Society met in Hoxie Wednesday, November 24, 1921.

T. C. Guthrie was chosen president pro tem.

A round table discussion of "The Cause and Prevention of Common Colds" took up the time of the afternoon. One of the practices of the times, that of cutting children's hair so high upon the head during the winter months was condemned, it being the consensus of opinion of those present that it should not be cut higher than the bottom of the ears.

G. A. Warren, C. C. Townsend, J. C. Swindle, H. R. McCarroll, T. C. Guthrie and A. J. Clay were present.

JEFFERSON COUNTY.

(By J. T. Palmer, Secretary.)

The Jefferson County Medical Society held regular session on November 1, 1921, with Vice-President T. W. Woodul presiding.

Others present: Drs. Troupe, Gill, Lemon, Breathwit, Jordan, Glover, Jenkins, Blankenship, Ramey and Palmer.

Several interesting cases were reported.

The committee on conference with nurses reported and was dismissed.

It was moved and seconded that the secretary take depositions in the Brunson case and pay for same out of funds in the treasury.

Adjourned.

ARKANSAS COUNTY.

(By M. C. John, Secretary.)

The Arkansas County Medical Society met in DeWitt October 11, in Dr. Rasco's office. The meeting was called to order by President Dr. Whitehead.

Present: Rasco, Winkler, Winters, Lumsden, Hill and Latimer of DeWitt; Drs. Moorhead, Neighbors and John of Stuttgart; Dr. Whitehead of Gillett and Dr. Dickens of St. Charles.

Dr. Rasco read a paper on "Tuberculosis," stressing early diagnosis and methods for making it and the various methods of treatment.

Dr. Winkler read two papers. The first, "The Effects of Olei Petrolii on the Human Brain" was a burlesque on the mental state of the community when hopes were running high that they were going to bring in an oil well at DeWitt.

The second was "Medical Hash," which dealt with the various fads and specialists of the past and present. It was indeed an interesting paper.

Drs. Morphew, Swindler and Drennen were selected to read papers at the next meeting which will be in Stuttgart, January 10, 1922.

After the society adjourned Dr. Winkler was host to the society at a three-course luncheon.

"The Arkansas Tuberculosis Association must have money for its program. It will have to come from the pockets of the people, it will have to come in small amounts because times are hard, but everybody should give SOMETHING."

"The Christmas Seal Sale is an annual event four weeks preceding the holidays which gives each one an opportunity to aid in the greatest reconstruction work this State can undertake. Let every family discuss this momentous question and decide that from the oldest to the youngest each member, by the purchase of Christmas seals, will have some part in raising a fund in Arkansas to blot out this dread disease."

Buy seals and save lives. Advertise to the world by using them that you are doing your part.

DIETITIANS NEEDED IN U. S. PUBLIC HEALTH SERVICE.

Washington, D. C., November, 1921.—The United States Civil Service Commission states that there is need for a considerable number of dietitians in the Public Health Service at hospitals throughout the United States and that until further notice it will receive applications for such positions.

The basic entrance salary offered is $960.00 a year with possible promotion to the basic pay of $1,344.00 a year. To all salaries there is added the increase of $20.00 per month granted by Congress. In addition, quarters and subsistence are furnished free by the Government.

Applicants are not required to undergo a written examination, but are rated upon the subjects of general education, weighted at 30 per cent, and technical training and experience, weighted at 70 per cent.

Full information and application blanks may be obtained by communicating with the United States Civil Service Commission, Washington, D. C., or with the Secretary of the local Board of Civil Service Examiners at the postoffice or custom house in any city.

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Original Articles.

CARDIAC NEUROSES.

George M. Eckel, M. D., F. A. C. P.,
Hot Springs, Arkansas.

The purpose of this paper is to call your attention to certain nervous and mental disturbances associated with organic or with functional disease of the heart. The relationship existing between the heart and the neuroses and phycho-neuroses herein described, is more than a mere association, and from a study of the cases it would appear that organic disease or functional disturbance of the cardio vascular system represented the dominant etiologic factor.

Not all of the cases show a special susceptibility in that the nervous symptoms appeared in persons with marked evidence of "nervous inferiority," or in those showing the stigmata of degeneration, with the cardiac symptoms merely aggravating or activating the neurosis, but oftentimes the nervous and mental disturbances were noted for the first time and gave evidence of bearing primary and direct relationship to the cardiopathy.

It is not my intention to discuss a text-book picture, but merely to go over a few cases that have come under my personal observation in private practice recently, and these will be considered from the viewpoint of the internist rather than the specialist in neurology. I find that the title of my paper as given on the program "Cardiac Neurosis," is a misnomer in so far as it would indicate that I was to present cases showing a distinct type of nervous and mental disturbance pathognomonic of disease of the cardio-vascular system; and I wish to correct such an impression, for in so far as my practice is concerned, I have not been able to differentiate a specific symptom complex, and it is not my intention to attempt to describe and substantiate a new disease entity.

It is true that not all of the cases presented a primary cardiopathy, but instead, the functional trouble with the heart came after the nervous symptoms were manifest,or after the patient had been told that there might be some heart trouble in his case; where the functional heart trouble would appear to be of psychic origin in specially predisposed patients.

These neuroses or functional nervous disturbances have especial reference to the sympathetic, autonomic or vegetative nervous system with certain associated psychic symptoms in some of the cases. These neuroses include the following: Neurasthenia, psychasthenia, neuro-circulatory asthenia and effort syndrome, anxiety neuroses, melancholia (mild types), hypochondriasis (mild types), senile or arterio-sclerotic psychoses in early form:

Etiology and pathology will be considered together, and here is shown a functional nervous disturbance (an affection of the sympathetic or autonomic nervous system) secondary to a cardiopathy, either organic or functional, with associated pathology of structure or function in the kidneys, liver, blood-vessels, and in some of the cases, the peripheral nerves and the brain.

Symptomatology, diagnosis, prognosis and treatment will be considered with the case reports.

Case 1. Male, white, aged 19, single, farmer, living in a malarial section of Arkansas, referred for treatment with a diagnosis

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

of serious organic heart disease. Family history negative. Personal history showed that patient had suffered many attacks of chills and fever, measles at the age of 18, otherwise had been well, and denied venereal history. History of present illness gave evidence of the present trouble, coming on after the attack of measles, about ten months ago; after the subsidence of the skin symptoms and fever, he noticed that heart action and pulse rate very slow, and gave patient much concern.

Present complaint as given by patient at time of examination, pain in chest on left side, beginning under left shoulder blade and radiating around to heart, malaise, insomnia, constipation and general weakness. General appearance was that of fairly well nourished young man with a sallow complexion, extremely nervous and agitated. Weight, 156 pounds with clothes; height, 5 feet 11 inches; pulse, 46; blood pressure, 128-95 (mercury manometer and stethoscope); temperature 98° F. Heart showed apex beat normal, no increase in area of cardiac dullness, valves competent, arrhythmia with skip beat in every five to twelve. Lungs negative. Abdomen showed palpable liver with moderately enlarged hard spleen, and no localized areas of tenderness on palpation. Nervous system showed deep reflexes exaggerated, abdominal and cremasteric present, no Romberg and eye grounds normal with pupil reacting to light and accommodation. Genito-urinary system negative. Skin and glands showed palpable cervical and inguinal glands, sallow muddy skin. Bones and joints negative. Mouth and throat showed teeth in excellent condition, throat negative, tongue badly coated. Ears and accessory sinuses negative.

Laboratory Reports.

Urine negative except for trace of albumen and heavy Indican; blood showed many malarial parasites (sub-tertian), red cells 3,400,000, Hb. 70 per cent; white cells 8,200 with polys 51 per cent, small lymphos 27 per cent, large lymphos 21 per cent, eosinos 1 per cent; blood chemistry gave urea 27 mg., uric acid 3, 1 mg., creatinin 2.2, and blood sugar 0.181 per cent; Wassermann negative. Feces negative for parasites and ova: Carbon-Dioxide--Alveolar-Air-Tension 25: Renal Functional test showed first hour 30 per cent, second hour 20 per cent (phenol-sulphone-phthalein injected intramuscularly). X-ray of heart and aorta negative.

Treatment.

Patient was given calomel and a citrated sodium phosphate laxative; quinine 10 grains every six hours for twelve doses, then 10 grains with 2 grains of blue mass and 1 grain phenolax, at bed hour; iron citrate (soluble) 7 1-2 grains, strychnine glycerophosphate 1-60 grain in tablespoon of glycerophosphate elixir of lime and soda three times a day. The baths were prescribed, and a suitable dietary containing adequate amount of protein to combat anemia, and the sugar and starch reduced because of the high blood sugar.

Patient left for his home after four weeks with the pain in chest gone, sleeping well, weight 148, pulse rate of 70 with no arrhythmia.

Comment.

When patient came for examination the mental attitude was that of anxious depression and he felt that he had but a short time to live on account of the heart condition; he had been told by his physician that he had a serious heart disease and must be very careful not to over exert himself in any way. He had given up all work and had become practically an invalid. After I had explained that there really was no organic heart trouble, but merely a functional disturbance which was of no consequence, the mental attitude changed, depression and anxiety disappeared, and since going back to his home, has been at work every day with no pain or discomfort about heart, and cheerful and normal in every way. This represents probably a vagal arrhythmia (youthful type) and much harm had been done the patient by the former grave prognosis offered by his physician.

Case 2. Female, age 31, married, white, housewife, living in Arkansas. Family history negative. Personal history showed measles and mumps before age of 10, influenza without complications in 1918, otherwise negative except for present complaint; menstruation began at 12, with three to five-day periods every twenty-eight days, no children and no miscarriages. History of present

illness showed present symptoms began ninety days ago with "palpitation or heart flurries," which gave patient much alarm.

Present complaint was of rapid heart action, marked depression with extreme agitation, constipation, insomnia due to the persistent idea that she would die if she went to sleep. The slightest disturbance would cause pulse to race and patient had sensation of impending death. General appearance was of a fairly well nourished woman of thirty, with alternate paling and flushing of the face, emotional excitability and depression. Weight, 117 with height 5 feet 6 inches; pulse, 108; blood pressure, 100-80; temperature, 99° F. Heart showed increase in area of cardiac dullness above and to left, weak rapid beat, no apex beat discernible, mitral systolic murmur not transmitted. Lungs negative; abdomen negative; nervous system showed markedly increased reflexes, tremor of extended hands, slight Romberg, hyperactive pupils with ophthalmoscopic examination of eye grounds negative. Genito-urinary system negative; skin and glands negative; bones and joints negative; mouth and throat apparently normal, but evidence of much dental work; ears and accessory sinuses negative.

Laboratory Reports.

Urine negative; blood examination showed nothing of importance in the way of abnormal findings; blood Wassermann negative; blood chemical findings practically negative except for blood sugar reading 0.187 per cent. Feces negative for ova and parasites.

Phenol-sulphone-phthalein gave renal function 75 per cent elimination of the dye injected intramuscularly and collected in one and two hours. X-ray of heart and aorta negative.

Goeseh test (0.5 cc. adrenalin chloride 1:1000) intramuscular injection gave marked positive reaction; there was marked increase in saliva after 1-20 grain of pilocarpine per hypo.

The patient was apprehensive at all times and seemed to realize that most of her fears were groundless, but was so much afraid that a building would crumble and fall upon her while she was out for a walk that she was afraid to venture out alone; realized that her fears were foolish, but said she could not help being afraid. In treatment, one grain of pituitary substance with 1-200 grain of atropine was given every six hours during the day; patient advised that she could not take the Hot Springs baths. An eliminant containing 30 sodium citrate, six grains sodium salicylate in tablespoonful of concentrated solution of sodium phosphate given forty minutes before breakfast daily. A dietary with reduction of the starches and sugars, well balanced was prescribed.

The patient was assured that the heart "flurry" was not evidence of organic dsease of the heart, but probably due a hyperthyroidism. X-ray films of the teeth revealed two badly abscessed lateral incisors (treated and filled teeth), and these teeth were removed.

After three weeks the pulse rate had dropped to 74 per minute, the nervous depression and anxiety had disappeared and patient was sleeping seven to eight hours at night. A mild chalybeate tonic was prescribed and pituitary substance and atrophine withdrawn, and patient sent back to her home. After seven months there has been no return of the nervous and mental symptoms and patient is apparently in good health. This case probably represents a psychasthenia developing upon a basis of hyperthyroidism, and it would seem that the abscessed teeth bore direct etiologic relationship to the increased output of thyroid secretion, with an apparent cure of the condition after removal of the focus of infection.

The basal metabolism studies in this case (indirect calorimetry) showed at first examination plus 22, and at the end of treatment plus 4.

Case 3. Female, age 28, white, married, housewife, native of Kentucky. Patient referred with a diagnosis of hysteria. Family history negative; personal history showed measles, mumps and whooping-cough before the age of eight; malaria a number of times; tonsillitis with tonsillectomy 1919; appendicitis with removal of the appendix in 1920; menstruated at age of eleven, average four-day period every twenty-eight days; married at seventeen, no children, but one miscarriage three years ago.

History of present illness showed trouble beginning four months ago with pain of dull

aching, boring character in chest (sub-sternal), headache and insomnia. Present complaint of pain in chest, headache, constipation, insomnia, and patient greatly depressed and apprehensive, thought she had a cancer of mediastinum since she nursed a cousin who died recently of cancer of the breast. General appearance was that of well-nourished woman of thirty, pallor, apathetic and inattentive so that questions had to be repeated, patient irritable and restless. Pulse, 78; temperature, 99° F; blood pressure, 140-70; weight, 146 with height 5 feet 4 1-2 inches.

Heart showed soft systolic murmur over base (not transmitted) and roughening over aortic area, area of cardiac dullness increased above and to right; lungs negative; abdomen negative; nervous system showed deep reflexes exaggerated, pupils reacting to light and distance and eye-grounds negative on ophthalmoscopic examination; genito-urinary system negative; skin and glands negative, except for pallor and palpable epitrochlears; bones and joints, mouth and throat, ears and accessory sinuses all negative.

Laboratory Reports.

Urine showed a trace of albumen with Reberts' solution, heavy indican reaction, but otherwise negative; phenol-sulphone-phthalein (renal functional) showed first hour 35 per cent, second hour 30 per cent (intramuscular injection of the dye); blood smear showed many malarial parasites (subtertain), blood count gave 3,900,000 red cells with hemoglobin 78 per cent, white cells were 7,600 with polys 52 per cent, small lymphos 27 per cent, large monos 17 per cent, eosinos 2 per cent; blood chemistry showed urea 28 milligrams, uric acid 3.2 mg., creatinin 2.1 mg. per 100 cc., and blood sugar reading 0.178 per cent; blood Wassermann was four plus positive with all methods; carbon-dioxide-Alveolar-air-tension read 30. Basal metabolism (indirect calorimetry) read plus six. Feces negative for parasites and ova. X-ray of heart and aorta gave evidence of aneurysmal dilatation of thoracic aorta and specific aortitis (arch).

Treatment.

Arsphenamine intravenously with mercury benzoate intramuscularly, and prescription (oral administration) containing kali iodide, kali citrate in two teaspoonfuls of concentrated solution of sodium phosphate twice a day; after four weeks there was marked improvement in clinical symptoms with subsidence of pain in chest, mental symptoms had disappeared and patient seemed to be in good condition. Patient developed mild case of influenza during the fifth week with moderate elevation of temperature which subsided after the third day, but patient turned face to the wall, refused food and declined to answer questions and during the night of the fifth day developed an active delirium with incoherence, disorientation and became very restless; was sleeping at 9 a. m. when nurse went to breakfast, but dressed and left hotel and went on a shopping expedition, making purchases of jewels aggregating $14,000 during the forenoon, wired for reservation for ocean trip on a boat to leave New Orleans the following week, introduced herself to business men and a banker as the wife of a wealthy oil man (she was the wife of a man with very limited income not exceeding $4,000 a year), and left a check for $100,000 with a local bank for collection. After getting patient back to the hotel, a spinal puncture was done, which gave a negative Wassermann on from 0.2 to 2 cc., no increase in globulin and a cell count of two lymphocytes per cm.; colloidal gold was negative. At 10:00 p. m. patient was given half ounce of somnos, a prolonged hot bath followed by ice cap, and dropped off to sleep which lasted until noon the following day when patient denied all recollection of the experiences of the day before, was rather confusd, but ate a good meal; no fever, no mental symptoms aside from mild confusion for six days, and left for her home during the sixth week. Since returning home she has apparently been normal in every way, attending to household duties and social affairs; returned for treatment seven months later and x-ray of chest showed marked improvement in aortitis with the aneurysmal dilatation practically gone; no pain in chest and apparently well.

Comment.

It would seem from analysis of the case that the mental disturbances represented acute confusion with transitory delusions from a toxemia following influenza; and the negative spinal fluid, including negative col-

loidal gold, and subsequent clinical history would tend to rule out the possibility of a luetic pycho-neurosis or paresis. The luetic aortitis and relative dilation of the heart would seem to bear direct etiologic significance.

Case 4. Male, white, aged 52, married, merchant, born in the States and living in Texas; referred with a diagnosis of angina pectoris. Family history negative (father and mother alive at ages of 79 and 73, respectively, and well; personal history gave chickenpox and measles before age of ten, malaria a number of times, denied venereal history; smoked from twelve to fifteen strong cigars a day and drank four or five cups of black coffee daily; no alcoholic history. History of present illness indicated that trouble began seven months before with acute pain in region of heart with gaseous distension of abdomen, the attacks usually coming on after the noon-day meal (heavy meal of the day). Present complaint was of severe pain in precordium with blanching of face, sweating, marked weakness and sensation of impending death; attacks lasting for about one minute and were usually relieved by large dose of soda mint. Insomnia, constipation, and shortness of breath on exertion. General appearance showed a man of fifty, over weight and flabby, pasty sallow skin; marked depression and anxiety. Heart examination gave increase in area of cardiac dullness below to left and merging with liver dullness to right, soft systolic mitral murmur, apex seventh interspace mid-axillary line, regular in rhythm; lungs negative; abdomen showed liver two fingerbreadths below costal border; nervous system negative, except for exaggerated deep reflexes; eye-grounds negative. Bones and joints negative; genito-urinary system negative; skin and glands negative except for pasty sallow complexion; mouth and throat gave evidence of much dental work with pyorrhoea and caries; throat negative except for mild chronic pharyngitis; ears and accessory sinuses negative.

Laboratory Reports.

Trace of albumen, a few granular casts, indican 2 plus,and specific gravity 1012; phenol-sulphone-phthalein (intramuscular injection) first hour 25 per cent, second hour 15 per cent or total of 40 per cent elimination in two hours. Blood smear negative for malarial parasites; Wassermann negative; red cells and hemoglobin moderately reduced 3,900,000 and 78 per cent, white cells, 8,100; blood chemistry showed 39 milligrams, uric acid 4.2 mg., creatinin 2.3 mg. per 100 cc., and blood sugar 0.192 per cent; carbon-dioxide-alveolar-air-tension read 25; gastric contents showed total acidity of 80, free HCl 55; x-ray of chest showed a dropped heart or heart in transverse position with a moderate hypertrophy of left ventricle; x-ray studies of abdomen showed no abnormality other than a large colon.

Treatment.

Calomel and a citrated sodium phosphate mixture; the baths and a proper dietary reducing the sugars and starches. The cigars were reduced to two a day and one cup of coffee at breakfast was suggested. Later on a prescription containing iron and ammonium citrate, strychnine glycerophosphate, arsenic, and elixir glycerophosphate of lime and soda; graduated exercise with avoidance of hill climbing, and massage. Explained to the patient that the polygraph and other studies gave no evidence of angina pectoris and that with a regulated diet and cutting out the black cigars and coffee to excess, the heart attacks would not return, served to change the mental attitude; the patient became cheerful, color returned and weight was reduced. After five weeks patient returned to his home and again became interested in business and seven months later reported that he had had no recurrence of the anginoid attacks, was comfortable and caring for large business interests without difficulty. X-ray of teeth showed three abscessed roots which were extracted.

Comment.

In this case much damage was done the patient by telling him that he had angina pectoris, and patient had become virtually a chronic invalid; his mental condition was more serious than the physical and had rapidly developed after being told that he might die at any time and advised to get out of business. It is incumbent upon the physician to make a careful and thorough examination in all cases before making a diagnosis of organic heart trouble and offering a grave

prognosis, since oftentimes severe neuroses and psycho-neuroses and especially hypochondriacal and neurasthenic conditions could be avoided. Too often a cardiac murmur does not mean organic heart disease, and arrhythmias and pain about the heart may be due to dietary indiscretions, to a myalgia or intercostal neuralgia. Oftentimes much mental suffering on the part of the patient, his family and his friends, and much economic loss could be avoided if a thorough and painstaking examination were made in all cases of suspected heart disease; it is well to appreciate the value of mental prophylaxis and to remember that it is easier to prevent than to cure a psycho-neurosis, especially where a cardiopathy appears to be of primary importance in the etiology of the condition. While not minimizing the great value of electro-cardiographic studies in all cases of suspected heart disease, it is well to remember that the polygraph is not a plaything, but has real value as a diagnostic aid, and much valuable information is always to be had from a study of the clinical history and a thorough physical examination. It is well to remember in cardiopathies that the future welfare of patient as well as the relief of symptoms depends as much upon the prognosis offered, mental prophylaxis and attention to personal hygiene and diet as to therapeutic endeavor in the administration of drugs.

METHODS OF TONSILLECTOMY.

J. H. Buckley, M. D., Fort Smith.

There are practiced now four methods of tonsil enucleation. Dissection, dissection and snare, tonsil dislocation and removal without any dissection, known as Sluder's method, several modified Sluder methods. Under the method of dissection may be mentioned dull and sharp instruments and finger dissection, which belongs under dull instrumentation. With the dissection and snare method, the dissection may be done with dull or sharp instruments, and the tonsil snared off with cold wire.

The Sluder method consists in dislocation of the tonsil from its fossa and pushing it through the fenestrum of a modified physic guillotine and severing the tonsil from its attachments by pushing forward a sharp blade with the thumb.

Some operators have modified the Sluder by dulling and shortening the blade. After the tonsil is engaged, the forefinger is swept around the end of the instrument thereby removing the tonsil.

Beck does a modified Sluder by using a Vedder tip through which the tonsil is pushed, and then snared off with a snare wire that occupies the groove made for the purpose of concealing the wire until the time for its use. This groove is in the inner aspect of the ring.

LaForce pushes the tonsil through the rectangular opening of his instrument, closes the hemostatic clamp, leaves the clamp closed for ten minutes and severs the tonsil from its attachments by pushing forward the sharp knife. Fifteen years ago, when I quit general practice, which I had been doing for ten years, and began special study of eye, ear, nose and throat, the men under whom I studied, removed tonsils, by grasping the tonsil with siezing forceps and dissected the tonsil out with a pair of scissors. I followed that method for three or four years, and getting accustomed to it I was loath to abandon it; but I became thoroughly convinced that less hemorrhage occurred when a tonsil was snared out with a wire than when enucleated with a pair of scissors; so I gave up the scissors enucleation and adopted the dissection and snare method.

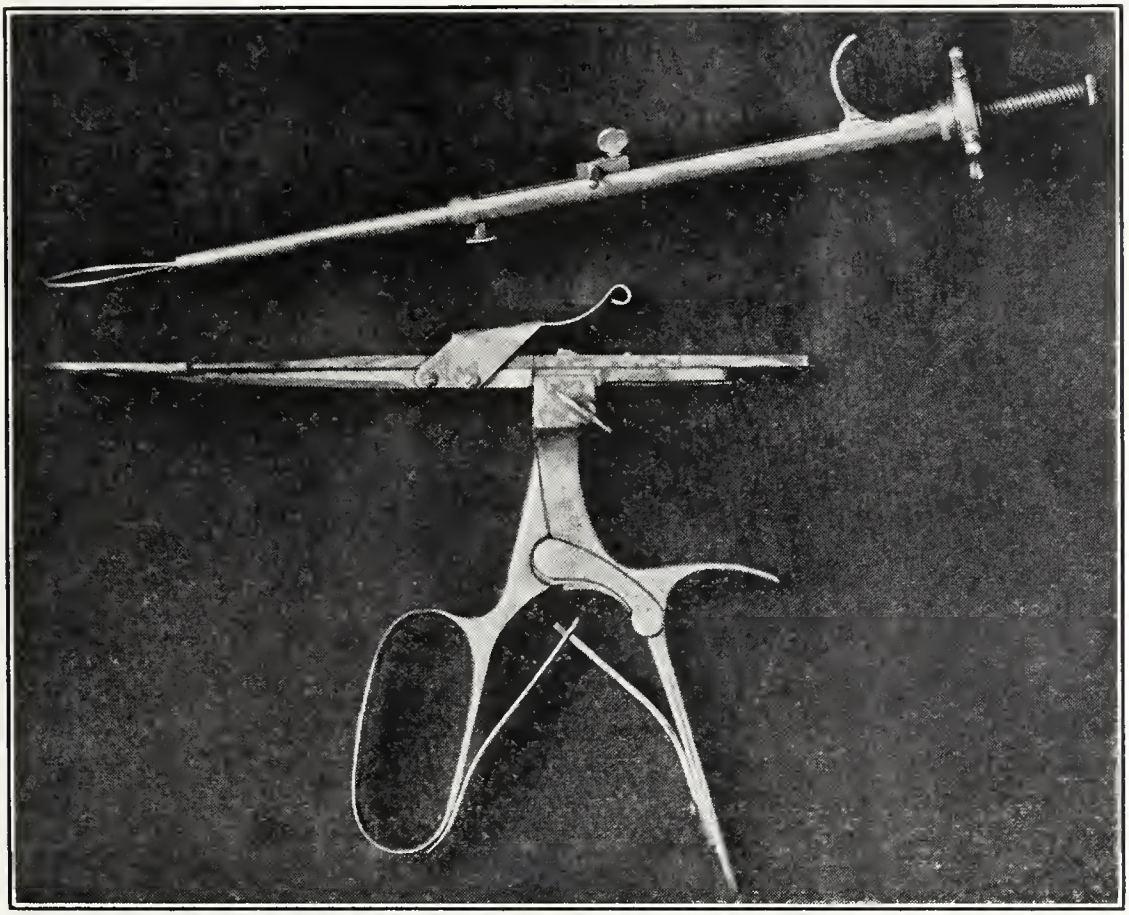
During the fifteen years I have been removing tonsils, I accidentally removed three uvulas and part of two anterior pillars. All these mishaps occurred when I used the dissection and snare method. I have seen quite a few similar accidents happen to other operators, real sure enough, good operators. The tonsil is grasped by forceps and the tonsil is pulled toward the median line, the dissection is done and then the snare wire slipped over the forceps and traction is continued. In this way at times the uvula and other parts of the soft palate are pulled into the wire loop and removed. There is always some blood obscuring the field of operation when the dissection and snare method is used. This adds much to the dangers. A good aspirating device would lessen these dangers and if I used

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

the dissection and snare method I most certainly would use a good aspirator.

These accidents so frightened me with the snare and dissection method that I began using the LaForce treatment. I found, however, with this instrument, which has a hemostat and a sharp knife, that unless the hemostat was left applied six or seven minutes, for each tonsil, energetic hemorrhage occurred in quite a large per cent of cases. This is a longer time than I care to spend for this work.

Realizing the advantages of the LaForce hemostat, and also knowing that tissue removed with a snare wire has less tendency to cause hemorrhage than if removed by a knife, I used the LaForce instrument which removes the tonsil with a knife. I would thread the distal end of a LaForce instrument through the wire loop of a snare, engage the tonsil with the hemostat of the LaForce instrument, pull the engaged tonsil through the wire loop and shorten the loop until snug pressure was felt, gradually release the hemostat, and cause the wire loop to cut through the parts crushed by the hemostat. This acted nicely, but it is quite unhandy, and believing the same results could be obtained and in a simplified manner, I had Mr. George Ward, not an instrument man, but an all round mechanic, make an instrument for me. Before he completed it, however, I received a cut of Braun's Snaretome, and thinking it about what I wanted, ordered one, but I was disappointed upon its receipt.



Illustrating article by Dr. J. H. Buckley, "Methods of Tonsillectomy."

The ring is too thick and the fenestrum too small, with it the tonsil is very hard to dislocate from its bed. The blade is shortened and dulled, and it will not cut, neither will it crush; but acts only as a holding forceps, for the snare to remove the tonsil. The groove for the wire is in only a part of the ring the rest of the wire riding upon the blade. The blade is pushed forward and pulled backward by the thumb, which is rather awkward for me.

With the instrument I had made there is a crushing hemostat and the ring is thin enough that a tonsil can easily be dislocated from its bed and pushed through its opening. The hemostat is then closed tightly, the

loop of wire is shortened until snug pressure is felt, when the hemostat is slowly released. This is accomplished by lessening the grip on the handle, a spring automatieally pulls the hemostatic blade baek opening the fenestrum. This blade is one and one-half millimeter thick at its distal end; so you see it has no cutting qualities. Its opposing surfaee of the ring of the instrument is a little thicker and the two surfaces when brought together do crush; both surfaces are serrated. As the hemostat is released the superior constrictor muscle contracts and the tonsil is drawn outward and after the correct technique is mastered it is possible to regulate the size of the wire loop so as to allow everything to eseape except the tonsil and its capsule.

With this instrument I have never removed anything except the tonsil and its eapsule. I can not say this for any of the other methods I have used. With this instrument I have two or three times unintentionally removed all the tonsil and none of the capsule. This in my opinion, is the ideal tonsillectomy, I wish I could habitually do it, but that procedure habitually, is impossible. Remove all the tonsil and leave all the capsule would leave a most wonderful after effect. The capsule intact acting as an aponeurosis lessening opportunity for infection and deformity.

On more than one occasion, sometimes unintentionally, and other times for demonstration purposes, have I pushed a portion of the anterior pillar into the fenestrum, closed the hemostat, and afterward releasing the hemostat, have seen the pillar retract, creeping surely and gracefully out of harm's way into a position of safety, when if this condition had obtained during a Sluder or some of the modified Sluders, everything engaged in the fenestrum would have been removed. The LaForee instrument, like many of the other instruments engaging the tonsil after the manner of Sluder, removes everything that is engaged in the opening.

Hemorrhage and deformity is much more likely to occur if something other than the tonsil and capsule is removed, than if they and only they, are removed. The Beck or Beck-Schenk instrument in my hands can not be used successfully in a large per cent of eases. I am not able to get a good leverage or good wrist movement with it. As soon as the snare is pulled the wire is released from the rigid ring which acted as its protector, and frequently it follows nicely in the connective tissue bed, especially if there be no adhesion. A graduated rigid ring, however, is much easier to tuck a tonsil into. I had the ring and the fenestrum of my instrument made the same size as the largest Sluder. I find this large enough to accept the largest tonsil, and the blade being non-cutting I ean elose it slightly or otherwise, thereby regulating the size of the fenestrum; so that the one sized instrument allows itself to be used for small, medium and large sized tonsils. A slotted are is fastened to the shank of the hemostat, a broad, smooth spring is bradded to the baek under surfaee of the arc. From the under side of the shank of the snare is a bar about one-fourth of an inch long, extending downward. At the end of the bar is a flattened surfaec resembling slightly a wire nail head. This bar slips into the slot of the arc and the flattened, broad end is pushed upward by the spring on the arc exerting pressure upon the shank of the snare. In this way the snare is held upon the shank of the hemostat until its release is desired, then the wire loop is tightened around the tonsil, the snare is pulled toward the tonsil and is automatically released from the shank of the hemostat.

On September 8, 1921, I demonstrated this instrument before the Tenth Counеillor District Society, operating upon a fifteen-year-old boy, using a local anaesthetic, in the parlor of Hotel Main, Fort Smith. I did not use a gown for the patient, nor one for myself; in fact, I did not remove my coat, I did not get a drop of blood on patient's elothes, nor a drop on my elothes; nor a drop on carpet. After the patient left the room I looked into the vessel used as a euspidor, and there was less than a teaspoonful of blood in it. This was not an ideal ease to demonstrate this instrument upon, an attempt had been made to remove his tonsils by a physician living in a State other than Arkansas. A part of each tonsil had been removed, as had all of his uvula. There were quite a few adhesions, yet those who saw the ease, I believe, will admit that the instrument did remove the tonsils and their capsules. I began using this instrument in February, 1920, and I have not had to take a suture when it was used. Before I began its use I think I would

average one case a month that required suturing on account of hemorrhage.

In engaging the tonsil in the hemostat I use the thumb instead of the forefinger for four reasons: The rest of the hand is out of the way; there is more power in the thumb. There is enough power in the forefinger, but a large reserve of power lends courage and increases confidence. There is more contact surface on ball of the thumb than is on ball of forefinger, and the thumb nail is much less liable to injure the anterior pillar than is the nail of forefinger.

Why this instrument?

It lessens hemorrhage.

It lessens deformity.

It saves time.

With it a person can be detonsillized in two minutes, or less time. Allow me to state that I make no claim to originality in this instrument. It is an assembled tool, covering ideas I have gotten from other instruments. The manner of its assemblage, however, is mine.

We suggest that doctors go a little slow in accepting the extravagant claims put forth by various pharmaceutical manufacturers concerning preparations that have not been tested and approved in a manner which all men can accept. Usually information may be obtained by referring to *New and Nonofficial Remedies*, and *Propaganda for Reform*, published by the A. M. A., or, in case such books are not available, a reliable answer may be obtained by addressing the Council on Pharmacy and Chemistry of the A. M. A., 535 North Dearborn Street, Chicago, Illinois.

THE SLANDERER.

The very name invokes loathing. Though more or less in human form, this degenerate remnant of the silurian age is the most contemptible of creatures. The scandalmonger is disliked, the liar is despised, but the slanderer is loathed. Using falsehoods or facts that are distorted as some would juggle statistics, the slanderer spreads a most subtle poison, that blasts lives and reputations. Slander can not be controlled any more than you can stop a lie, once it has gained credence. Compared with the social diseases, it is the greatest evil of our age. The slanderer is more dangerous and despicable than those misguided enemies of society who use bombs and poison secretly.

Whenever you discover a slanderer posing as an honorable member of our profession, let your conscience be your guide; but be sure that you do your full duty.—*Malsbary, Editorial in the Southern California Practitioner.*

GOVERNMENT NEEDS FOR WORKERS IN REHABILITATION.

Washington, D. C., December 19,—The United States Civil Service Commission states that there is urgent need for reconstruction assistants and aides in physiotherapy and occupational therapy, trained nurses, and physicians, to serve in hospitals and other establishments of the United States Public Health Service and the Veterans' Bureau, in the care and rehabilitation of men injured in the World War. The Commission has announced that it will receive applications for these positions until further notice. The applicants will not be given written scholastic tests, but will be rated upon their education, training, experience and physical ability.

The Commission points out the importance of filling these positions promptly with the best qualified workers available.

Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or from the Secretary of the Local Board of Civil Service Examiners at the postoffice or custom house in any city.

"Permit us to suggest humbly, therefore, that you immediately forward to the secretary of your county society your check in full for your 1922 dues. You will thus lighten the labor of the officers of your county and State society, lessen the expense of administering your society's activities, and you will at the same time enjoy the enviable position of those who meet promptly their just obligations."

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WILLIAM R. BATHURST, Secretary-Editor
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The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

PLANS FOR 1922.

With the support and co-operation of the members, the Arkansas Medical Society expects to accomplish more during the coming year than in any former like period in its history. In the November issue of The Journal, our readers doubtless saw the complete roster of the membership. This roster, together with other valuable records, are filed away and have become part of the history of the society. That list contains the names of over 1,100 members in good standing. We are not only proud of our growth, but feel that while strength lies in numbers, it does not lie in numbers alone without concentrated effort toward real achievement.

Beginning with the new year the annual dues (including subscription to the Journal) will be $3.00, payable now to the secretaries of your respective local societies. With over 1,100 paying members our plans outlined for the year's work, we feel that the society can and will become a great power for good throughout the State. Therefore, it is urged that all members of county societies pay their dues promptly so that the work will not be delayed.

Many new features will be added, and the increased revenue will enable us to do larger and better things in the interest of science and human welfare.

One of the most important of these plans concerns the school children. We are furnishing leafllets pertaining to the cause and prevention of such diseases as malaria and typhoid. These leaflets will be distributed to the schools with instructions to paste one copy of each leaflet in the pupil's school books to be referred to at stated intervals by the teachers. The importance of instruction to the children on matters of health preservation cannot be overestimated and will mean much to the coming generation.

Another plan which has long been mooted, is the employment of a legal representative by the Council to attend to what legal matters may develop alike concerning the State, County and District Societies. Through the State Secretary he will advise all the Auxiliary Boards of the State Society, such as State Board of Medical Examiners, State Board of Health, etc., and it is expected he will be of wonderful assistance in obtaining the legislation so much needed.

We want to make our Annual Meeting of increasing benefit to our members. We expect at the next Annual Meeting to present a scientific exhibit of unusual interest and educational value. If necessary we will engage

trained instructors to make the work more profitable. To accomplish these things, it is fully expected that the accumulated dues of $3.00 will cover the whole cost, and that there will be no occasion to call for assessments from local organizations, but this can not be accomplished unless the members themselves keep up these dues and remain in good standing. Let us all co-operate to make 1922 the banner year in the history of the society.

Appropriately we may close by wishing our members, advertisers and exchange editors, a Happy Christmas and a Prosperous New Year.

Personals and News Items.

Dr. L. H. Slocumb of Fort Smith, has moved to Ferguson, Mo.

Dr. Wm. M. Majors of Paragould, has moved to Lafe.

Dr. W. E. Bailey of Little Rock, is in New Orleans taking post-graduate course at Tulane University.

WANTED: Young Physician Desires a good location. Address Physician, P. O. Box 166, Palestine, Ark.

Dr. R. F. Darnall of Little Rock, was elected President of the Pulaski County Medical Society at their meeting December 5, 1921.

The following names should be added to the official roster in the November issue of The Journal: W. R. Knoefel, Hot Springs; H. R. Peoples, Hot Springs; Robert E. Oliver, Newcastle; J. L. Roberts, Murfreesboro

The first examination of the National Board, under the new plan, in Parts I and II will be held as follows:

Part I, February 15, 16, and 17 (1922), inclusive.

Part II, February 20 and 21 (1922), inclusive.

Applications for examination should be received no later than January 15, 1922. Application blanks and Circulars of Information may be had by writing to the Secretary, Dr. J. S. Rodman, 1310 Medical Arts Building, Philadelphia, Pa.

The Southern Medical Association, representing sixteen Southern States, held its fifteenth annual session in Hot Springs, Arkansas, November 14-17.

Dr. Seale Harris of Birmingham, Alabama, was elected President. The other officers were as follows: Dr. W. A. Mulherin of Augusta, Ga., First Vice President; Dr. W. T. Wootton of Hot Springs, Arkansas, Second Vice President; Mr. C. P. Loranz of Birmingham, Alabama, Secretary, and Dr. M. Y. Dabney of Birmingham, Alabama, Editor. Chattanooga was selected as the next meeting place.

ANTI-TUBERCULOSIS CAMPAIGN.

To the Members of the Arkansas Medical Society:

Please permit me to call your attention to the campaign now being waged in our State by the Anti-Tuberculosis Association; and appeal to you to aid it in every manner possible. Especially let us be active and generous toward the sale of Christmas Seals.

Let us not forget that the Anti-Tuberculosis Association is the child of the Arkansas Medical Society, it having been born at one of our annual meetings ten or twelve years ago.

The lowered incidence of the malady and reduced death rate in our State is the source of much pleasure to us, and should stimulate within us even greater zeal.

Why not pledge ourselves at our next annual meeting not to cease in our efforts until county and inter-county sanitariums shall have been built all over our State?

Great as would be the economic result, paramount to this would be the elimination of so many thousands of foci of infection and providing proper homes and care for the unfortunate victims.

CHAS. H. CARGILE, President.

Bentonville, Ark., Nov. 29, 1921.

NOSTRUMS AND QUACKERY: VOLUME II.

In 1911 the American Medical Association published "Nortrums and Quackery." This volume of 500 pages represented an accumulation of much of the material published up to that time on the nostrum evil, quackery and allied matters affecting the public health.

The book was extensively reviewed, both in medical and lay periodicals, and the first edition was quickly exhausted. A second edition of Volume I, some 200 pages larger, appeared in about a year, and this also has had a wide and general circulation. Since January, 1913, when the second edition was issued, THE JOURNAL has continued to publish articles of interest to the public on the nostrum evil and on quackery, and these articles have been republished from time to time in pamphlet form. The number of inquiries coming to THE JOURNAL for information relative to various quacks, "patent medicines" and allied subjects has now led to the issuing of a second volume in which all of the material published since the second edition of Volume I has been brought together and freely illustrated. The book, uniform in style with Volume I, contains more than 800 pages. It has a most comprehensive index including references both to the present volume and to Volume I. It may be conservatively stated that these two volumes constitute a veritable encyclopedia on the nostrum evil, quackery and unscientific medical empiricism. There are chapters on "cures" for the alcohol, tobacco and drug habit, for consumption, for deafness, for epilepsy, for kidney disease and diabetes, for obesity and for rheumatism. There are chapters on medical mail-order concerns, medical institutes, mineral waters and quackery of the drugless type. There is a chapter of miscellany containing much interesting information on subjects of a quasimedical nature. The book is useful; it is interesting; to the physician who would be well informed it is indispensable. It should be on the reception room table of every physician in the country. If it is carried away surreptitiously by the patients, so much the better.—*Jour. A. M. A.*, Nov. 26, 1921.

HOT SPRINGS MEETING OF THE SOUTHERN MEDICAL ASSOCIATION.

A little more than 20 per cent of the members of the Arkansas Medical Society outside of Hot Springs attended this meeting. A very good record. Sixty-two ladies accompanied the Arkansas physicians.

Many favorable comments appear in Medical Journals published in the South and we copy in part from the Medical Insurance and Health Conservation the following editorial:

"It would seem that nothing was left undone that could possibly have been arranged for, to add to the entertainment of the occasion. Wives of the local doctors out-did themselves in looking after their guests' comfort and pleasure. Theatre parties were arranged, automobile drives enjoyed, shopping groups chaperoned, and sightseeing in general enjoyed by the ladies, to whom attendance upon the regular business sessions of the Association did not appeal; while dinners, informal dances, a grand ball and reception, golf, and a boxing contest were among the entertainments.

"It would seem that no excuse remains for any physician who attended this big convention, to come away unfamiliar with what Hot Springs has to offer for all kinds of physical troubles where thorough elimination of the system of patients, through properly supervised medicinal and hot baths, will help toward cure. Many who may, before advent of this meeting, have had doubts regarding the efficacy of the Hot Springs baths, we are sure left the meeting fully convinced of their value.

"The Association program, which was ably carried out, was one of the very best ever presented by the Southern Medical Association.

"Attendance was over fifteen hundred, and an unusually large crowd of the busiest and most prominent physicians and surgeons from the sixteen different Southern States represented in this organization was present for the four days' sessions.

"Space will not permit us to go into detail more than just to hint at the splendid papers which were read by recognized authorities. All who sacrificed themselves in any manner in order to attend the meeting, must feel well repaid for their expense and trouble."

CRAIGHEAD COUNTY MEETING.

The following notice of a meeting of the Craighead County Medical Society recently appeared in the Jonesboro daily papers. We publish it in full with the hope that other counties may benefit from the suggestion:

Jonesboro, Ark., Nov. 20, 1921.

Dear Doctor:

The Craighead County Medical Society will meet in the office of Dr. Willett, on Wednesday evening, November 23, at 7:30 p. m. Thanksgiving being on Thursday, our regular

meeting date, we will move this session up one day.

Each of the doctors who attended the Hot Springs meeting of the Southern Medical Association, which has just closed, will tell us of the inspiration gained at this session and the many things learned while there. Those in attendance were Drs. Altman, McAdams, Howell, Bates, Hale, Cothern and possibly others.

A subject of very vital importance to the Jonesboro and the surrounding country will be discussed. It concerns the doctors more in a personal way than it does the people, but is of interest to all. Unless you are here you will miss the gist of the matter.

Remember the place, time and above all, remember to come.

Lest you forget we quote you TEN WAYS TO KILL A MEDICAL SOCIETY, to-wit:

Don't go to the meetings. If you do go, go late.

If the weather doesn't suit you, don't think of going.

If you go to a meeting, find fault with the work of the officers and members.

Never accept an office, as it is easier to criticize than to do things.

Get sore if you are not appointed on committees; but, if you are, do not attend the meetings.

If asked by the chairman to give your opinion on a matter, tell him you have nothing to say. After the meeting is over tell everyone how things should be done.

Do nothing more than is absolutely necessary; but, when members use their ability to help matters along, howl that the institution is run by a clique.

Hold back your dues, or don't pay at all.

Don't bother about getting new members. "Let George do it."

Be one whom Kipling had in mind when he says:

"It ain't the guns nor the armament, nor the band they can play,
But the close co-operation that makes them win the day.
It ain't the individual, nor the army as a whole,
But the everlasting teamwork of every blooming soul."

W. W. Jackson, President.
Thad Cothern, Secretary.

REGISTRATION.

Hot Springs Meeting, Southern Medical Association November 14-17, 1921.

	No. Doctors	No. Ladies Accompanying Doctors
Alabama	47	16
Arkansas (outside of Hot Springs)	231	62
Hot Springs, Ark.	81	.....
District of Columbia	9	1
Florida	14	3
Georgia	41	5
Kentucky	50	18
Louisiana	53	6
Maryland	9	1
Mississippi	56	7
Missouri	70	17
North Carolina	27	2
Oklahoma	68	19
South Carolina	11	1
Tennessee	156	39
Texas	98	24
Virginia	17	1
West Virginia	8	....
Other States	28	13
Total	1,074	235
Sanitary Engineers	15	.....
Scientific Exhibits, Association Office, etc.	24	.....
Commercial Exhibits	90	6
	1,203	241
Ladies	241	
Grand Total	1,444	

These figures were compiled from the card registration. There are always quite a number of doctors attending the meeting who neglect to register at the Association headquarters. The number who attend such meetings and fail to register is variously estimated at from 10 to 15 per cent of the total registration. If we take 10 per cent as a fair estimate, adding that to the 1,074 doctors registered, we have an apparent attendance of 1,181 doctors and a grand total of 1,551.

GORGAS MEMORIAL.

Institute of Tropical and Preventive Medicine to Be Established in Panama.

Of particularly deep interest to all members of the medical profession and to all others interested in questions of public health and sanitation is the recent announcement of the plans of the Board of Directors of the Gorgas Memorial for the establishment of a Memorial Institution in the city of Panama for research and the extension of means of prevention of tropical diseases.

Anyone who saw the old Panama at the time of the abandonment by the Freneh of the work of the first eanal, involving so much wasted energy, the loss of thousands of lives and some hundreds of millions of dollars, could not but be struck with the present aspect of Panama, its splendid sanitation, its beautiful cities, its five hospitals, and above all, by the completion of the Panama Canal itself, making Panama one of the most beautiful and salubrious spots in the world.

It is well known to members of the medical profession that the aceomplishment of this great work and the sanitary regeneration of Panama are due to the efforts of the late William C. Gorgas, Surgeon General of the Unitee States Army; and to his efforts more than to any other, suecess for the work must be credited.

The proposed memorial will be built adjacent to the new two million dollar Santo Tomas Hospital, and the use of its eomplete facilities has been tendered the Gorgas Memorial to aid in the launching of the work.

The memorial building itself will consist of a dignified classic structure patterned after the lines of the Pan-American Union in Washington, D. C. It will house the laboratories and provide facilities for the teaching of students from the various tropical countries and from our own leading schools of tropical medicine, such as Harvard, Johns Hopkins, and the University of California.

In commenting upon the field of work before the institute, Admiral Braisted stated that among the diseases which will be studied in addition to yellow fever and malaria, are dengue, pellagra, beriberi, leprosy, cholera, and the various myeoses. It is the consensus of opinion that tremendous advanees ean and will be made through the efforts of the researeh work in this field.

The Tropies, which are so prolifie in vegetation of every kind, have been equally fertile in the development of all types and kinds of dread diseases, which tended to make them unsuited and impossible of habitation until careful sanitation made them safe. They, then, can become the most desirable, the most attraetive, and the most prosperous of abiding places. This very fact has made the eity of Panama extremely desirable as a home for the work to be undertaken.

The humanitarian benefits to aecrue from the establishment of this wonderful tribute to General Gorgas are almost beyond eonception. Its complete success means the fulfillment of General Gorgas' greatest desire, that of eliminating these devastating tropical diseases, and at the same time is a fitting recognition of the world-wide importance that the profession of medicine played in the construetion of THE PANAMA CANAL.

Marriages.

MARRIED.

Luck-Clements—Dr. Benjamin D. Luck, of Pine Bluff, and Miss Wordna Clements, of Little Rock, were married at the home of the bride's parents November 15, 1921.

County Societies.

PRAIRIE COUNTY.

(Reported by J. C. Gilliam, Secretary.)

The Prairie County Medical Society met in regular annual meeting at DeValls Bluff, November 27, 1921.

The election of officers for the ensuing year resulted as follows: President, T. G. Porter, Hazen; vice-president, James Parker, DeValls Bluff; treasurer, W. W. Hipolite, DeValls Bluff; secretary, J. C. Gilliam, Des Arc.

GREENE COUNTY.

(Reported by F. M. Scott, Sec.)

The Greene County Medical Society met December 8, 1921, with Dr. Scott of Jonesboro.

The program consisted of a quiz, led by Dr. Wilson on "Internal Hemorrhage."

Election of officers for 1922 resulted: President, B. E. Ellis, Greenway; First Vice President, P. L. Dickson, Paragould; Second Vice President, W. M. Majors, Lafe; Secretary-Treasurer, F. M. Scott, Paragould.

LAWRENCE COUNTY.

(Reported by H. R. McCarroll, Sec.)

The Lawrence County Medical Society held its regular monthly meeting at Walnut Ridge, Ark., Wednesday, December 7, 1921, at 4:00 p. m., at the office of Dr. T. C. Neece.

J. C. Hughes, the Vice President, presided and the usual opening exercises prevailed.

A round table discussion of the "Modern Treatment of Diphtheria and Bronchial Asthma," by W. W. Hatcher, comprised the scientific program for the afternoon. The papers were well discussed and the physicians seemed to enjoy the program. It is believed that the fact that diphtheria is now a preventable disease, like smallpox and typhoid, should be generally known by the laity, as lots of people would be glad to have their children immunized by giving inoculations of diphtheria toxin-antitoxine as is given in typhoid. By this means it can also be determined whether the child is immune and does or does not need the treatment.

The following officers were elected for the ensuing year: W. W. Hatcher, President; Earl Thomas, Vice President; A. J. Clay, Secretary-Treasurer; J. C. Hughes, Delegate; T. C. Guthrie, Alternate Delegate; and H. R. McCarroll, Censor.

FRANKLIN COUNTY.

(Reported by Thos. Douglass, Secretary.)

The Franklin County Medical Society held its regular meeting at Branch, October 11, 1921, at the office of Dr. Gammill. Besides Dr. Gammill, who presided, there were present: Drs. Williams, Northum, Akin, King and Douglass, members; and visitors, Drs. Holt and Slocumb from Fort Smith and Dr. J. J. Smith from Paris.

The secretary read extracts from a paper on Public Health which was intended for a public meeting which did not materialize. The editor of the Branch Argus was present and published extracts from the paper in the next issue of his paper.

An interesting case was presented by Dr. Williams, of a boy with a tumor just behind the right ear. Dr. Williams had shown this same case to the society four years ago when the growth was about half the present size. This patient was x-rayed by Dr. Holt and thought to be sarcomatous.

We had an excellent dinner at the hotel given by the physicians of Branch.

The next regular meeting was held at Charleston at the office of Dr. A. C. Northum. Present: Drs. Neissl, Gammill, Williams, Porter, Bollinger, Northum and Blackburn, members; and Dr. St. Cloud Cooper and Dr. W. R. Klingensmith, visitors from Fort Smith; also Dr. Gray of Vesta.

Dr. Bollinger presented an interesting brain case. Dr. Klingensmith gave an interesting talk on urological diagnosis and exhibited the McCarthy cysto-urethroscope.

The next meeting will be held at Ozark and will be the annual meeting and election of officers.

Book Reviews.

General Medicine.—The Practical Medical Series. Edited by Frank Billings, M. D., and Burrell Raulston, M. D., Chicago. Volume I, Series 1921. Published by the Year Book Publishers, 304 South Dearborn St., Chicago. Price, $2.50.

This book is composed of a review of recent articles on medicine. They are briefly stated, carefully selected and present a very interesting and instructive manual.

Pulmonary Tuberculosis.—A hand book for students and practitioners by Edward O. Otis, M. D., Professor of Pulmonary Diseases and Climatology, Tufts College Medical School, Boston, Mass. Second Edition. Price, $3.50.

This manual presents many case histories and it is the hope of the author that it will be an aid in making a reasonably early diagnosis and in applying the correct methods of treatment.

Practice of Medicine.—A Manual for Students and Practitioners. By Hughes Dayton, M. D., New York. Fourth revised edition. Published by Lea & Febiger, Philadelphia, 1921. Price, $2.25.

This little volume has been prepared to serve as a hasty reference by physicians. It is thoroughly up-to-date and in keeping with the advances in the knowledge of infectious diseases and functional affections of the heart.

EXOPHTHALMIC GOITER AND ITS NONSURGICAL TREATMENT.—By Israel Bram, M. D., Instructor Clinical Medicine, Jefferson Medical College, Philadelphia. Published by C. V. Mosby Company, St. Louis, Mo. Price, $5.50.

The author of this book particularly stresses the important facts bearing a practical relationship to Graves' Disease, as well as the salient points concerned in the successful therapeutics of goiter. He hopes to convince the medical profession that exophthalmic goiter does not belong in the realm of surgery.

TUBERCULOSIS AND HOW TO COMBAT IT.—A book for the patient, by Francis M. Pottenger, A. M., M. D., Monrovia, California. Published by C. V. Mosby Company, St. Louis, 1921. Price, $2.00.

This book is published in order to put in a permanent form talks which have been delivered in his sanitarium from time to time by Dr. Pottenger. The book is of sufficient interest to make it acceptable to medical men who do not have time to read more extended works.

DISEASES OF THE SKIN.—A Practical Treatise for the Use of Students and Practitioners of Medicine. By Oliver S. Ormsby, M. D., Chicago. Second Edition, thoroughly revised. Illustrated with 445 engravings and four plates in colors and monochrome. Published by Lea & Febiger, Philadelphia. Price, $10.00.

This edition has been brought up to date by rewriting approximately four hundred pages. Fifteen new diseases are described. After reading this book we are convinced that it reflects its subject as completely as the limits of a single volume will permit.

THE FUNDAMENTALS OF HUMAN ANATOMY, Including Its Borderland Districts. From the viewpoint of a practitioner.—By Marsh Pitzmann, A. B., M. D., Professor of Anatomy in the Dental Department of Washington University, St. Louis, Mo. One hundred illustrations. Published by C. V. Mosby Company, St. Louis, Mo. Price, $4.00.

This volume represents a modern text-book of human anatomy. An attempt has been well made to pay more regard than has been customary to the modern pedagogical emphasis on the correlation of ideas. Logic is given to take the place of memorizing, of which there is at best in anatomy necessarily a great amount.

PHYSICAL DIAGNOSIS.—By W. D. Rose, M. D., Lecturer on Physical Diagnosis and Associate Professor of Medicine in the Medical Department of the University of Arkansas. Demonstrator of Clinical Medicine and Chief of the Medical Section of the Isaac Folsom Clinic; Visiting Physician Logan H. Roots Memorial (City) Hospital, Little Rock, Arkansas. Second Edition. Three hundred nine illustrations. Published by C. V. Mosby Company, St. Louis, 1921. Price, $8.50.

This edition has been largely rewritten and supplemented by much new material. It is profusely illustrated and in all fairness to the author we predict that the medical profession as a whole will look to this work as their chief guide on physical diagnosis.

THE GLANDS REGULATING PERSONALITY.—A Study of the glands of internal secretion in relation to the types of human nature. By Louis Berman, M. D., Associate in Biological Chemistry, Columbia University. Published by The MacMillan Company, New York.

This book tells about the glands of internal secretion. It tells how the idea of a gland of internal secretion came into the human mind, and of the contributions that have conveyed into a single body of knowledge is worth while. It further describes how the glands influence the normal body; influence on the mind and the effect upon human evolution.

DISEASES OF CHILDREN.—Presented in two hundred case histories of actual patients selected to illustrate the diagnosis, prognosis and treatment of the diseases of infancy and childhood, with introductory section on the normal development and physical examination of infants and children. By John Lovett Morse, A. M., M. D., Professor Pediatries, Harvard Medical School, Boston. Third Edition, Fifth Printing. Published by W. M. Leonard, 711 Boylston Street, Boston, Mass.

This volume is now three books in one—A book on the "Normal Child;" "Infants Feeding" and "Diseases of Children." The author presents this method of case teaching, which has been used in the Harvard Medical School. It is a recognized method of teaching far superior to recitation, quizzes and conference.

KEEN'S SURGERY.—Volume VIII. By Surgical Experts. Edited by W. W. Keen, M. D., L.L.D., Hon. F. R. C. S., Eng. and Edin., Emeritus Professor of the Principles of Surgery and Clinical Surgery, Jefferson Medical College, Philadelphia. Octavo of 960 pages with 657 illustrations, twelve of them colors. Published by W. B. Saunders Company, 1921. Price, Volume VII and VIII and Desk Index Volume Cloth, $25.00 net per set.

This volume represents the master work of the principles and practice of surgery. Composed of various authors of over one hundred in number, and edited by Dr. W. W. Keen, Philadelphia.

A very interesting chapter by Dr. R. Tait McKenzie is given in the eighth volume on "The Place of Physiotherapy in Surgical

Treatment." It includes "Medical Electricity," "Radiant Light and Heat," "Massage" and "Mechano-Therapy."

General Pathology.—An introduction to the study of medicine. Being a Discussion of the Development and Nature of Processes of Disease. By Horst Oertel, Strathcona Professor of Pathology and Director of the Pathological Museum and Laboratories of McGill University and of the Royal Victoria Hospital, Montreal, Canada. Cloth, pp. 357, with illustrations. Price, $5.00 net. New York: Paul B. Hoeber.

It is not overpraise to state that this work of Oertel's is one of the outstanding books of the day. Written in a style that is commendable and in the scientific spirit without which every book on the subject of pathology falls short of being in the first rank, it gives the reader a thorough interpretation of all the problems in pathology, some of which no doubt have perplexed him on account of his limited knowledge, due to the fact that he has never been fortunate enough to acquire an illuminating book on the subject.

The Assessment of Physical Fitness, By Correlation of Vital Capacity and Certain Measurements of the Body.—By Georges Dreyer, C. B. E., M. A., M. D., Fellow of Lincoln College, Professor of Pathology in the University of Oxford. In collaboration with George Fulford Hanson. With a foreword by Charles H. Mayo, M. D., Rochester, Minn. Cloth, pp. 128, with twenty-four tables. Price, $3.50 net. New York: Paul B. Hoeber.

This is a book that should command the attention of all physicins who are interested in industrial medicine, actuaries of insurance companies, public health nurses and settlement workers, for the reason that unlike most books on the same lines, the author contends that the occupation of the individual plays a large part in his physical dimensions.

To quote Dr. Mayo who wrote the foreword: "The importance of the physical fitness of man has been only partially appreciated in the estimate of prognosis by physicians in the examination of the sick and in the measurement of the lung capacity by examiners for insurance companies. Dr. Georges Dreyer has shown that the estimation of vital capacity is more than a mere test, that it indicates the tendency to health and resistance to disease, and that in a prognosis of life's duration it parallels very closely the results of a general examination."

PROPAGANDA FOR REFORM.

Serum for Pernicious Anemia.—"Ph. Rahtjen, A. M., Ph. D.," Pasadena, Calif., informs laymen that he has immunized goats against the germ of pernicious anemia and that patients have responded favorably to the "serum." Reference to medical literature does not disclose just what Rahtjen's serum is, and a search of American medical literature for some years past fails to disclose any publication by Rahtjen on any subject. In 1917 the Rahtjen Tuberculosis Sanatorium, San Francisco, Calif., exploited the Rahtjen cure for tuberculosis with the claim that "the remedy seems to cure tuberculosis in all its forms with equal celerity and certainty;" and yet people are still dying of tuberculosis. In 1920, so the newspapers had it, Rahtjen was offering a "New-Life Fluid" which was a long step forward to counteract old age. This was in March, 1920, yet people continue to grow old. According to recent newspaper accounts, Rahtjen is making his extract from Mexican bulls and cows; the first for males and the second for females (Jour. A. M. A., Nov. 26, 1921, p. 1753).

CINCHOPHEN [Abbott]

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In arthritis. Grace, from his experience, regards CINCHOPHEN as the drug of choice when it is desirable to favor the kidneys. (See A. M. A. Journal, issue of Oct. 15, 1921.) He also found it better tolerated by the stomach in the cases treated.

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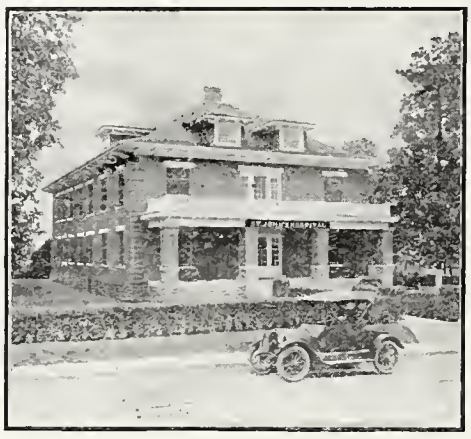

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Original Articles.

DIFFICULTIES AND SUPERSTITIONS ENCOUNTERED IN PRACTICE AMONG THE NEGROES.*

S. W. Douglas, M. D., Eudora.

Most of the difficulties in negro practice arise from two sources; their dense ignorance to things medical and hygienic, and to the color of their skin.

They expect more of the doctor than do more enlightened people. Even in the most chronic conditions, it is extremely difficult to get them to return for continued treatment. If they do not get results from one treatment, they usually prefer to make the second visit to another doctor. It appears impossible to get them to take a continued course of treatment. This accounts for so many uncured chronic conditions and venereal diseases. We count ourselves fortunate if we get them to take quinine in effective doses for three consecutive days. Yet, because of an apparent racial immunity, clinically demonstrable, chronic malaria is rare as compared with white people. It has been shown by R. H. von Ezdorf that many of them who do not show clinical malaria are gamete carriers. This makes them even a greater menace than the active cases.

It is also impossible to get them to provide adequate ventilation, observe a proper diet and to take proper exercise. Poor housing and over-crowding greatly increase morbidity among them. Our results in the treatment of gastro-intestinal, heart and lung diseases are comparatively poor. They deem that food not common to their every day diet, such as cheese, sausage, salt fish, etc., as light diet and very fit for the sick. Bathing in fevers is looked upon as very dangerous to the patient. The rest cure in heart and lung diseases is entirely impracticable. Besides not knowing the importance of rest, there are many instances in which economic conditions prevent it. The idea of taking fresh cold is so instilled into them that we can not secure open air treatment in bronchial and lung diseases.

The negro is peculiarly immune from some diseases and susceptible to others. In my ten years work at Eudora I have seen only one case of gall stones in a negro, and that case was at least two-thirds white blood. I have not seen a case of skin cancer. Sinus infections are rare as is also pernicious malaria a rarity among them. I have never seen a malarial spleen palpable beyond the costal margin; neither have I seen a case of hemoglobinuria.

On the other hand, the social status of the negro makes him particularly susceptible to venereal diseases. The black belt presents the State Board of Health with a man's size job in its attempt to control venereal diseases. Promiscuous intercourse is the rule. The marriage vow, when there is any, is not regarded. Nature endows him with strong passions, strong muscles and a very vigorous constitution. Poor housing conditions, irregularity in eating and sleeping, venereal diseases, sexual excesses and other abuses have deprived him of a greater part of this heritage.

Diagnostic difficulties are mainly due to ignorance. Part of this ignorance may be possessed by the physician. Leading questions to be answered with yes or no, are best avoided. They get very unreliable information. Subjective symptoms are usually very much exaggerated. It is unusual to find a case of any kind that has not what they call

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

"inward fever." In most of these instances they have no fever at all. If the thermometer does not show fever, you will have to depend upon the history of sweating, periodicity of the symptoms, the condition of the tongue and upon the urine and blood examination. The man who tries to diagnose in negro practice without making a thorough physical and laboratory examination is courting failure. The negro likes to be examined. You not only get much needed information; but you also make a profound impression on him. You beget great confidence if you can describe some of his symptoms before he expresses them. You must inspire confidence. If you show hesitation, doubt or anxiety, you will soon find another doctor on the job. This change is made without notice or ceremony, for the exigencies of negro practice is very detrimental to the close observance of medical ethics.

The color of the skin adds greatly to the difficulty in the diagnosis of skin lesions. Discolorations from superficial inflammations are not easily determined. Plethora, anemia and jaundice are hard to recognize. Even the sclera of the eye is frequently so pigmented that these conditions can not be recognized from it.

To the novice in negro practice there is much confusion in anatomical terms. We know that the "chin bone" is the crest of the ilium, the "tongue palate" is the soft palate, the "pit of the stomach" may reach from the ensiform to the pubes, and that the "almond of the ear" is the tonsil. I have had a number of patients who had entirely lost their ear wig.

In the matter of etiology, there are cases ranging from simple causes to rank hoodooism. Malaria is still believed to be due to bad drinking water, as is also most bladder and kidney disturbances. Many times the diagnosis is much confused by a history of a former injury. It is unusual to find a case of gonorrhea that was contracted in any other way besides by a strain. I have had several cases of menstrual disturbance that, according to the mothers of the young girls, were directly traceable to the fact that the girl had never had intercourse. Abuse of the sexual function produces a host of anxious seekers for the relief of impotence. Overwork is invariably given as the exciting factor in these cases. In slave time and before the negro was brought to America, he believed that all diseases were either produced by violence or by evil spirits. In the older generation this is still believed.

It is in the realm of treatment that we get a refreshing variety. I heard the virtues of corn-shuck tea and hog-hoof tea praised so ardently as a febrifuge that I wrote the J. A. M. A. to know if either had any therapeutic value. Jimson weed leaves are in great favor to reduce fever, being bound about the neck, wrist and ankles. I have seen cabbage used the same way. One case of puerperal sepsis was being treated with tea made from dirt-dobber nest. She died. Teas made from the dung of sheep, goats and rabbits are widely used in acute fevers. Urinating upon a hot brick is widely used as a treatment for bubo. "Falling of the tongue palate" (septic sore throat) is usually greatly benefited by lifting the palate back into place by the simple process of twisting the hair on top of the head into a wisp and pulling strongly upon it. I have had two cases of gonorrhea treated by injections of urine. Having intercourse with a virgin is another popular remedy. A pan of water under the bed is still used for night sweats. A piece of lead, coin, asafetida, nutmeg or buckeye on a string about the neck, waist or ankles, are important curative and prophylactic measures that few negroes neglect.

Other things being equal, the negro goes to the doctor who dispenses his own medicine. A great deal of discretion must be shown in prescribing. They seem to have a natural aversion to pills, tablets and capsules. "Liquish medicine" is more popular, and will be taken to the last drop, provided it is red and given in tablespoonful doses. This whim must be catered to if we expect to get any continued course of treatment. You may persuade a negro to take one hypodermic; but you will hardly have an opportunity of giving a second one. Strong smelling liniments are very popular, as they are particularly partial to "rubbing medicine." Poultices are also very popular; but many of them are too nauseating to discuss.

The Lord is certainly with the negro woman in confinement cases. The physician is

not called except where there are complications. The black midwife is used. She is usually entirely ignorant of all obstetrical knowledge, and confines her activities to the important ceremony of tying and cutting the cord. Meddlesome midwifery is a term that applies to more physicians than to black mammies. They rarely make even vaginal examinations. In the presence of so much filth, this non-interference evidently accounts for the comparatively small amount of sepsis found in their work.

The squatting posture in labor is still used. Labor is facilitated by greasing the abdomen with fresh butter. An axe under the bed is used to cut the pains. "Sniffing" the patient is commonly used in protracted cases. This is done by sniffing snuff up the nose to produce sneezing or vomiting. Labor is also hastened if the husband will get on the bed and grunt with the wife. Blowing into an empty bottle hastens the expulsion of the placenta. Puerperal hemorrhage is speedily controlled by eating a piece of the placenta. Pieces of fresh onion tied about the wrists may control convulsions. The child of an eclamptic woman is said to be possessed with an evil spirit. The hands must never be raised above the head during labor for fear of twisting the cord about the baby's neck. In boy babies the stump of the funis is always cut long and turned up. Salt in the palm of the baby's hand is an invaluable remedy for convulsions. The midwife usually blows the breath of life into the child when it is first born. The finger and toe nails of the infant should always be bitten off instead of cut off, for fear that it might become a thief.

These thoughts would not be worth your time for the amusement they afford, if they did not convey to us our enormous responsibility to these black people. The doctor can do a great service by some systematic method of instruction to his patients. The State has an unlimited field of activity in health propaganda.

DISCUSSION.

Dr. Chas. H. Cargile (Bentonville): I practiced among negroes thirteen years. Some of you who have not had similar opportunities and experiences can not fully imagine their conditions and superstitions, especially what they call conjuring.

I imagine that Dr. Thibault can tell us a good deal about these things. As an illustration, I will relate the case of Henry Wilson, a mulatto, who came to me complaining of an illness which he said was caused by having been conjured by Sol Wright, who was jealous of him. He said that Sol had wrapped some gunpowder, alum and buckeye in a rag and put it under his doorstep. I tried in vain to dissuade him. In two or three days I heard that he was crazy by spells, and that he imagined that Sol at the head of one thousand negroes was pursuing him. He returned to me in one of his lucid intervals, and right or wrong, as you may think, I pretended to agree with him, and prescribed iodide and bromide of potash in full doses, and assured him that it would work the poison out through an eruption on his skin, which would appear in a few days. In due time he returned, and in a joyful spirit showed me many eruptions. His mind was fully restored to normalcy.

Dr. H. Thibault (Scott): This is a more serious paper than it appears; a good deal more serious than we think.

The first point that the doctor touched on was the matter of ethics among physicians practicing among negroes. I don't take his viewpoint of it at all. The negroes do what the physicians in the community permit them to do. And, if the physicians go to their homes and encourage them to change doctors, they do just as the white people do, under like circumstances; they change whenever they get in debt (laughter). As a general rule, the physicians have themselves to thank for it.

The only thing we can do to a negro that thinks he is conjured is the same thing I do to him when he is afraid of spirits at night. I show him the conjuring can't hurt him; that I go out doors, through the graveyards or anywhere else by myself. When he gets scared, he always wants to be close to the man who isn't afraid; or, as one boy who worked for me expressed it: I said, "George, what are you running for?" He said, "I don't know; but you look like you are going to run, and I knowed if you was, it was time I was gone!"

He will do everything in the world to make you believe that he is going to die. He will watch your face every minute, and, if you show the least bit of concern about him, it would scare him to death. Still, he does everything he can to impress you with the fact that he is just about to go. He watches you all the time to see if he produces that impression.

Now, as to the number of things they use, there are so many that nobody can enumerate them. I have acquired the ruthless habit of cutting the mole's feet, cricket nests, the elder flowers, lead bullets, etc., from off the babies' necks. It don't do any good to temporize.

I don't hesitate to tell them that the Lord made fools, damn fools, and statisticians; and then made midwives after all of them. (Laughter.) They are the only people in the world that know everything. There is no question you can ask one of them, from how many children the patient is going to have, to whether she is married, has been married or is going to be married, or anything else, that they can not answer, on the spur of the moment, in their way.

I think it is our duty, speaking seriously, to educate these people as much as we can—we have limited grounds to cultivate—not for their own benefit altogether; but we are thrown in contact with them directly and indirectly to such an extent that public health work is a Christian duty among the negroes. Those things are awful funny to us. It is not so funny to see a negro woman in the last stages of consumption, probably spitting all over the floor and on the wall. It is not much fun in it when you think that probably her daughter is doing your washing, and piling these clothes on the bed and carrying them home covered under an old blanket, with probably two or three boys in the house with syphilis lying

around on that same bed, where your pocket handkerchiefs, towels and things are placed to be handled by the rest of the family. It is not so funny to introduce magnolia buds into the vagina to stop leukorrhea aud all that sort of stuff. When you get to think of it right down at the bottom, it is not such a funny problem.

Now, as the essayist says, they believe all disease is produced by violence or conjuring; and in taking the history, we hardly ever find their parents dying a natural death. The negro says he was hurt. They don't come out and say, "I was conjured;" because they think you are going to laugh at them. "Well, he got hurt." That's the way his father died. "How did your mother die?" "Well," he will say: "I think she was poisoned," if her illness was long and lingering.

Dr. Thos. Douglass, of Ozark: This is a more serious paper than appears on the surface, as Dr. Thibault remarks, in that it is a part of the great negro question, and that is one of the most menacing problems before the American people today. As was remarked before, the negro is not unlike his white brother. As Dr. Thibault says, when he gets in debt, he changes doctors, and that's right soon after he patronizes him; and he is just exactly like the poor white man, in that respect. We have exactly the same trouble in collecting from the negro that we do from a lot of white folks. And, we find, on investigating the subject, that a great many white people have the same superstitutions that the negroes have, particularly in regard to obstetrical work. The white folks sometimes put an axe under the bed to facilitate delivery pains, and they do a great many other things of the same kind, just about as valuable resorting to the same means in obstetrical work that the essayist said the negroes do. The white folks believe in a lot of superstitions. They think that the pregnant woman should never put her hands above her head. I don't thiuk that I ever attended a case in obstetrics in the country that I didn't hear white people of intelligence tell the patient not to put her hands above her head, and that, of course, was just about as valuable as a good many other things that are practiced in obstetrical work. The negro is superstitious, and I think that we are prone to criticise him for his ignorance and superstition, forgetting the fact that he is only two or three generations removed from savagery. If the white race were no farther removed from savagery than the negro race, I imagine that we would be just about as ignorant and superstitious as they are. The people of the United States have been in too much of a hurry about civilizing the negro. It can't be doue in one or two geuerations. It is tedious work, requiring time and patience aud perseverance, and it will be a long time before we, as doctors, are able to instruct the negro in a system of ratioual therapeutics.

Now, in regard to conjuring, there is more in conjuring than is seen on the surface. Those of you who read John Uri Lloyd's book will remember that the old negro and his wife in that story were past masters in the art of conjuring. That old negro practiced conjuring all the way through, and he brought about some very important results as part of his conjuring. The more intelligent of the negroes, I think, kuow about what the value of conjuring is. That old negro and his wife went about bringing results to pass just like intelligent Christians go to work to bring about answers to their prayers. They do the best they can to make the results follow; and that's what that old negro did, and the results followed. If he said that a man was going to die as a result of his conjuring, he saw that he died. That will follow in a good many cases, in regard to all sorts of treatment, as with regard to the answers to prayers. If we go to work to answer our own prayers, they will come much nearer being answered. And, in the rational treatment of negroes, we have to be patient and persistent, and sympathetic. If we deal with them in that way, deal with them as children, we will accomplish a great deal; and some time in the far distant future they will be raised up to a condition of rational intelligence. And, really, I think they deserve credit for the advance they have already made.

Dr. Douglas (in response): I certainly trust that you will see the serious side of this negro problem; that it is a matter of ignorance that we have to combat, and that they are not only a menace to themselves, but to us also. I trust that it will not be long before there will be decided steps taken to educate the negro in at least hygienic and sanitation matters.

THE MANAGEMENT OF CHRONIC NEPHRITIS—REPORT OF CASES.*

G. E. Tarkington, M. D., Hot Springs.

Since chronic Bright's disease is a condition so widespread that it is of interest not only to the internist, but the surgeon and the specialist in medicine. I deem it unnecessary to offer an excuse for presenting this paper; and since our knowledge of this disease is still limited particularly as to the exact etiology, and since the treatment has been, and is yet, the source of much dissension. As a matter of fact we have not here added greatly to our knowledge since the days of Bright. I feel that if this discussion brings out helpful points and adds to the rational treatment of chronic nephritis, this paper shall not have failed in its purpose. Then, too, we have of late added to our facilities for diagnosis and prognosis in these cases through blood chemical studies.

It is not my intention to review the subject of nephritis for I doubt very much if even an outline could be presented in the space of time alloted this paper. I merely wish to present some of the salient points in the management of chronic nephritis, and to profit by such discussion as the paper may elicit.

Definition: Since two types will be discussed in this paper, the definition includes "A chronic productive inflammation of the kidneys—the chronic parenchymatous nephritis of Delafield," and "A chronic diffuse in-

*Read before the Arkansas Medical Society, at the Forty-fifth Anuual Session, Hot Springs, May, 1921.

flammation of the kidneys with marked cardio-vascular changes — chronic interstitial nephritis."

Etiology: In a general way, chronic nephritis represents the later stages of an acute or sub-acute inflammatory process in the kidney.

(a) Heredity does undoubtedly play a part in the etiology of the condition and there are families with a rather marked predisposition to nephritis.

(b) In some cases it would seem to be "only the anticipation of the gradual changes which take place in the organ in extreme old age" (Osler).

(c) Age and sex shows the disease to be more common in males, and rarely are the manifestations noted before the age of fifty.

(d) Of frequent occurrence in persons having an arterio-sclerotic tendency from any detrimental influence such as chronic malaria, chronic lead poisoning, advanced syphilis and alcoholism.

(e) Habitual over-eating and drinking are factors in its causation.

(f) Gout.

(g) Chronic articular rheumatism.

(h) In persons of high strung nervous temperaments working under high pressure to which is oftentimes added over-indulgence in rich food and drink, and sedentary habits.

(i) Circulatory disturbances as in chronic heart disease with repeated or chronic congestion of the kidneys.

(j) Arterio-sclerosis—here it has not been decided whether the renal or vascular changes take place first, as to whether arterio-sclerosis is primarily the cause of the renal disturbance or the renal condition an etiologic factor in the causation of the sclerosis (vascular). The foregoing applies rather to the chronic interstitial type of nephritis than to the parenchymatous variety. In the parenchymatous type which may at times be an earlier stage of the condition usually recognized as chronic interstitial nephritis, we have a more definite relationship in the etiology to toxic factors as in the acute infectious processes; for example, scarlet fever and measles, and in such chronic infections as tuberculosis and syphilis; and in this connection, syphilis may induce an acute nephritis which in the course of the infection may develop into a chronic disease of the kidneys. Exposure to cold and wet are factors in the etiology, especially in persons living in low marshy places. Males are more frequently affected than females and the disease appears earlier in life. We assume as the most important factor in the production of chronic nephritis, an infectious agent acting over considerable length of time, some toxic substance acting directly upon the parenchyma of the kidney and by taxing the organ in elimination; but it has not been proved beyond doubt by experimental work that this is true. In this connection I believe the excellent work of Christian at the Harvard School of Medicine will have much to do with shaping our conception of the etiologic factors in nephritis.

Pathology: It is not the purpose of this paper to go into the details of gross morbid anatomy of chronic nephritis nor to discuss the minutae of the morbid histology; a knowledge of the text-book pictures is assumed, and in private practice little opportunity is offered for such studies on account of the difficulties in getting permission from the family for necropsies. This is due to sentimental reasons and an inability to appreciate the value of such studies in facilitating a better understanding of the widespread condition of chronic Bright's disease.

Symptoms: In the parenchymatous variety the symptoms may be merely a continuation of an acute nephritis, usually they have escaped detection until the process has become established and a chronic Bright's disease is found upon examination. Oftentimes there is a history of digestive disturbances, loss of appetite, a gradual loss of weight, and the patient complains of being "bilious" and of being "just run down," never suspecting a kidney lesion until puffiness about the eye-lids or ankles calls his attention to the fact that he needs the advice of a physician. Headache, irritability, vomiting and periods of diarrhea not easily accounted for by dietary indiscretions ensue. On examination one finds a sallow, pasty complexion; usually a coated tongue with other evidences of gastro-intes-

tinal disturbances. Oftentimes the blood pressure is not increased until late in the disease, and, while it is usually higher, at times it is lower than normal. Edema of the ankles and legs, and a general filling-up of the serous cavities; anasarca and edema of the scrotum appear. There is usually a marked diminution in the amount of urine secreted, except where large serous exudates are being absorbed, averaging about 500 cc. in the twenty-four hours; later the amount of urine is increased. The color is dark, muddy or smoky, and blood may be present. Albumen is present in large amounts, and tube casts of all varieties; indicanuria is usually noted and due to the digestive disturbance. The blood chemistry shows quite an increase in blood-urea (taking 15 mg. per 100 cc. of blood as normal); creatinin (with normal findings of 2 mg. per 100 cc.) is increased particularly in men with chronic prostatic involvement; uric acid (with a normal value of 2 mg. per 100 cc.) is increased and at times although there may be no gout, reaches a high point; the blood sugar is but slightly elevated, considering 0.10 per cent as normal. In the interstitial variety, the symptoms come in a more insidious manner and are seen at a later period of life, and more frequently in men. Here the gradual development of the symptoms permits the condition to be rather far advanced before the patient consults a physician. Usually there is a history of headache, irritability, insomnia and lessened capacity for work or the findings upon urinalysis in examination for life insurance, prompts the patient to seek the advice of a physician. Constipation is present oftener than not and usually there is complaint of digestive disturbances. The blood pressure is high oftentimes running well over 200 and ranging up to as high as 300 mms. mercury systolic; the pulse is hard, incompressible and may be rolled beneath the finger. The heart usually shows hypertrophy of the left ventricle, which occurs in the cardiac effort to overcome the increased resistance, the apex beat is displaced downward and to the left, and later the enlargement is more general with marked increase of the second sound at the aortic cartilage. Oftentimes a systolic murmur appears at the apex due to a relative insufficiency. The amount of urine is increased and is of light color or colorless, low specific gravity, showing in the majority of cases the "low fixed specific gravity;" albumen is scant showing usually a faint trace, tube casts, especially the hyaline form, are found; but as a rule they are few. Indicanuria may appear from the digestive disturbances associated. A moderate degree of secondary anemia with reduction of the red cell and hemoglobin. The blood chemistry shows an elevation of the blood urea, and the creatinin and uric acid, the blood sugar in uncomplicated cases is practically normal. The P. S. P. test for kidney function is reduced.

Special Symptoms: Mention has been made in a general way to symptoms referable to the skin as edema which is so prominent a feature in the chronic parenchymatous type, to the digestive disturbances, and to the cardio-vascular system. The respiratory system oftentimes presents symptoms of grave significance, as edema of the glottis, effusion into the pleural cavities and pulmonary edema. Bronchitis is a troublesome symptom, especially during the winter months. The dyspnea, especially at night and upon exertion as in climbing steps, may be marked.

The Nervous System and Special Senses: Headaches are seen early and are persistent, often of a migranous type, and neuralgias in various regions are common. Cerebral apoplexy is closely associated with chronic interstitial nephritis and may take place into the meninges or the cerebrum. The so-called "cerebral accident" are at times prominent and alarming, due in many instances to cerebral edema and may simulate cerebral hemorrhage so closely as to make differential diagnosis difficult or impossible. Trouble with vision may be at times the first symptom of the disease, "choked discs." A flame shaped retinal hemorrhage is common and less frequently a diffuse retinitis or papillitis, and there may be a uremic amourosis. Conjunctivitis and palpebral hemorrhages are fairly common. Auditory symptoms oftentimes occur such as dizziness, tinnitus aurium, and varying degrees of deafness.

Diagnosis: Oftentimes it is impossible to recognize the nephritis in its earlier stages, and in the great majority of cases when the patient comes under observation late, the diag-

nosis is easily established with the general symptoms, the urine, blood chemistry findings, P. S. P. test and the cardio-vascular symptoms and the latter are of great importance.

Prognosis Chronic nephritis is an incurable disease; but is not to be considered as incompatible with a fairly comfortable life for many years. The phenol-sulphonephthalein test (kidney functional of Roundtree and Gerrhaty) is of much value in estimating the functional capacity of the kidney, considering 60 per cent elimination in two hours for the dye injected intramuscularly as low normal, as low as 25 per cent is compatible with fairly comfortable life if care is exercised with referenee to the diet, exereise and symptomatic treatment instituted as indieated. The blood chemistry is of value in the prognosis and espeeially in cases in the male with prostatie hypertrophy and infection, a high ereatinin content of the blood is decidedly unfavorable; 5 mg. of creatinin per 100 ec. of blood is a bad omen.

Treatment: So much has been written with reference to protein restriction in dietary measures advocated in nephritis that a word here seems not amiss. In the parenchymatous type a moderately high protein diet is not only well tolerated, but is of mueh value particularly in the earlier stages of the disease; and in both types a well balanced diet containing a sufficient amount of protein to eombat the anemia is distinetly valuable. Milk must remain our greatest factor in the dietary treatment of nephritis; and milk is no inconsiderable factor in combating the tendeney to anemia. It puts but slight tax upon the kidneys in elimination and, as a rule, except in rare cases where there is an idiosyncrasy contra-indicating its use, it is a food substance imposing slight burden upon the digestive apparatus. Sweet milk, buttermilk and Bulgarian milk all are valuable. Fresh fruits and vegetables with moderate amounts of sugars and earbohydrates, milk and enough protein from meats to balance the diet is the better dietary. Especially in cases where there is assoeiated a chronie arthritis and with high blood sugar so often encountered, a restriction of the carbohydrates and moderate amount of meat is advantageous. Pure, plain water or an alkaline mineral water taken in liberal amounts is of mueh value in chronic nephritis; but where an aeute exaeerbation or some intercurrent affection demands the institution of a Carel regime, the intake of water must be restricted; and in edematous states the reduction in water intake together with a much restricted use of sodium ehloride in the diet, offers most as a preventive and curative measure. The constipation should be eombatted by arranging a suitable diet and giving attention to general hygienic measures remedying the anemia and the use of laxative diureties; and here such a prescription as the following has proven of much value in my work:

Sod. Salicylat., 8.0 gm.; Sod. Citrat., 25.0 gm.; Sod. Sulphat., 25.0 gm.; Aq. Menth. Conc. Solut. Sod. Phosphat. qs. (Sodamel), 180.0 ec.; M. Ft. Solut.

Sig.—One tablespoonful in water forty minutes before breakfast, daily.

It acts to stimulate the hepatic function, increases elimination, lessens the burden of the kidneys and the "buffer salts" also lessen the tendency to "acidosis" or lessen alkalinity of the blood, as well as affording an efficient laxative. For the high blood pressure general dietary measures, hydrotherapy, and the rational use of the iodides and nitrites. The following prescription I have found to be of value:

Sod. Iodid., 12.0 gm.; Sod. Nitrit., 2.0 gm.; Sod. Citrat., 15.0 gm.; Aq. Menth. Pip., 40.0 ce.; Syr. Simp. qs, 90.0 ec.; M. Ft. Solut; wrap in foil.

Sig.—One teaspoonful in water every six hours during the day, between meals.

The anemia seems best treated with an akaline iron mixture such as the following preseription:

Fe et Ammon. Citrat., 12.0 gm.; Liq. Kali Arsenit., 6.0 ee.; Kali Citrat., 25.0 gm.; Glyeerin., 20.0 ee.; Elix Glycerophosphat. Calc. et Sod. qs, 360.0 cc.; M. Ft. Solut.

Sig.—One tablespoonful in water three times a day, forty minutes after meals. When eardiac symptoms demand, strychnine, digitalis and caffeine are of value. And when arteriosclerotic changes with eerebral symptoms from an insufficient eirculation through the brain, these are of great value, even where

hypertension exists. Digitalis and alkali diuretics are of value in treating the edema.

The cerebral accidents as well as uremic symptoms are best treated by a high enema followed by two or three ounces of glycerine added to eight ounces of water and allowed to remain in the colon. Catheterization of urinary bladder is sometimes necessary. A sedative where indicated, and here morphia hypodermatically is in my opinion, the best drug. The removal by venesection of from twelve to fifteen ounces of blood especially in plethoric cases, is of distinct value. The use of glucose-sodium bicarbonate solution intravenously (1 to 2 per cent) of sodium bicarbonate with from 5 to 10 per cent glucose in normal saline) used in from 250 to 500 cc. quantities after venesection has proved of much value in my cases. And where there is markedly increased blood pressure, a spinal puncture with removal of from twenty-five to fifty cc. of fluid will at times do much for these cases.

Communications.

To the Members of the Arkansas Medical Society:

The Medical School believes that all the information possible regarding the history of Arkansas medicine should be preserved in a place accessible to the profession of the State. The library of the University of Arkansas School of Medicine, Little Rock, therefore desires to complete its files of all medical journals, and medical books and pamphlets published at any time in this State. The assistance of the members of the Arkansas Medical Society and other citizens of the State is earnestly solicited in these efforts. If there is any possibility that you might be able to supply any of the issues needed, will you not institute a careful search? If you think of any one who might possibly have any of the missing numbers, will you not bring this request to their notice? If you can locate even one of the missing numbers needed, please send it in. The favor will be greatly appreciated. Your copy might chance to be the only one in existence. It would be a great pity for it to be lost.

The thanks of the Medical School and the profession of the State are due to the various physicians and their families, whose donations have served to complete our files.

Proceedings Arkansas Medical Society. Have all except 1882 and 1886.

Proceedings State Medical Association of Arkansas. Have all 1870 to 1875.

Eureka Springs Medical Journal. Volume 1, have none. Volume 2, have Nos. 8, 9 and 12. Volume 3, have Nos. 1, 2 and 4.

Arkansas Medical Monthly, Little Rock. Jos. J. Jones, 1880. Have only Vol. 1, Nos. 1, 2, 3, 4, 5, 9 and 10.

Arkansas Medical Record, 1878, Hale and Lynn, Little Rock. Have volume 1, Nos. 1, 2, 3 and 4.

Journal of the Arkansas Medical Society (Old Series). Have Vols. 1, 2 and 3 complete. Vol. 4, short No. 2 (1893). Vols. 5 and 6, complete. Vol. 7, have none (1895-6). Vol. 8, have Nos. 1 to 5, inclusive.

Bulletin of the Arkansas Medical Society (Old Series) 1897-8. Have only Vol. 1, Nos. 2, 3, 4, 5, 6 and 9.

Monthly Bulletin, Arkansas Medical Society, 1904-1906. Volume 1, have only 4, 5, 8, 9, 10 and 11. Volume 2, have none.

Hot Springs Medical Journal (1892). Vol. 1, short Nos. 2 and 3. Vol. 2, short 9 and 12. Vol. 3, short No. 2. Vol. 4, have only No. 1. Vol. 5, have only No. 5. Vol. 6, short 1, 2, 3, 4, 5 and 6. Vol. 7, have only Nos. 1, 2, 3, 4 and 5. Vol. 8, have only 3, 4, 6 and 12. Vol. 9, have only 1, 2, 5 and 9.

Have none later than volume 9.

Dr. A. R. Stover,
University of Arkansas School of Medicine.

Little Rock, January, 1922.

The man who says this is not a time of opportunity does not know. There is always room at the top, but never so much as now, and big, brainy men of vision and his ability are in demand; men whose bodies and souls are in their work, with ideals that lead to inspiration and inspiration that leads to aspiration.—*J. A. Stucky, Lexington, Ky.*

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The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

DO WE FALL SHORT OF OUR DUTY?

Dr. Robert Caldwell on his retirement as president of the Pulaski County Medical Soeiety at the last meeting in the old year, took occasion to criticise the shortcomings of the society and incidentally, the alleged diffidence of the members individually. A copy of the address will be found under County Societies in this issue. He complains that not enough constructive work has been done; not because of lack of opportunities or facilities, but rather from a lack of inclination. He says that because of this alleged diffideuee that not only Memphis, St. Louis, Kansas City and medical centers further away, are drawing patients who belong in this territory; but that some of the smaller towns in the State are establishing hospitals and clinics and they, too, are drawing patients who should come to Little Roek. Dr. Caldwell says further, that there is lack of harmony and co-operation between the doctors and the leading hospitals and a lack of medieal researeh.

We are not prepared to say to what extent Dr. Caldwell's criticisms are justified. All the members will not agree with him on several points, but his criticism of the lack of interest in the society itself is not only a fault that needs remedying in the Pulaski County Society, but in many others throughout the State. With a membership of 127 he says the attendance frequently is not more than 10 per cent of the whole, and that it rarely reaehes 20. He truly says that when members excuse nonattendance on the ground that the programs are not interesting, the members are themselves to blame. With a bare quorum present there is little encouragement for any member to exert himself in getting up papers and with so few from whom to choose perhaps the best talent are not among those who do attend. Numbers is a potent factor in any cause. Ask any actor if he can play with enthusiasm before a "beggarly array of empty benehes." It takes all the heart out of the speaker and he must feel that if there were any appreciation of his work there would be a larger attendanee. To ask a doctor to prepare a paper and then for a score or less to turn out to hear it, is a slight—nay more it is mighty close to being an insult. If every member who has no really valid and honest excuse, would attend the meetings, they would not laek interest.

Dr. Caldwell comments on the lack of eordial relations between physicians. As he points out, two lawyers on opposing sides, may appear to be ready for personal combat

in argument; but once outside the courtroom, they are the best of friends. In the old days before the Eighteenth Amendment, it was not unusual to find opposing lawyers who had been ready to eat each other up in the heat of argument, taking a social drink at the noon hour. There is much truth in his contention that in other professions there is not the same spirit of jealousy and the "damning with faint praise" that characterizes the medical profession, not only in Little Rock, but well nigh universally. As Shakespeare puts it, " 'Tis true, 'tis pity and pity 'tis, 'tis true." And the greatest evil of this condition is that it reacts against the profession; for if one doctor refers slightingly to a brother in the profession, it is almost a natural sequence that hearing such comment from several at various times, the laymen will lose confidence in all.

The society appointed a committee to consider the matters suggested and make recommendations at a future meeting of the society. This means that the whole question will be discussed. That should bring out a good attendance of itself and may result in a greater interest being taken permanently in the meetings. Report of the committee with further comment will appear in our next issue.

Personals and News Items.

HAVE YOU PAID YOUR DUES FOR 1922?

Drs. M. L. and Frank A. Norwood of Lockesburg, visited in Little Rock this month.

Dr. A. C. Kolb of Hope has moved to Port Arthur, Texas.

Dr. and Mrs. D. W. Goldstein of Fort Smith, visited in Little Rock and Hot Springs this month.

Annual meetings for the election of new officers and the payment of dues should be attended to this month.

Dr. A. A. Blair of Fort Smith announces his connection with the Cooper Clinic as Director of Laboratories.

Dr. R. Q. Patterson of Little Rock recently left for New York to accept a position as interne in the New York Skin and Cancer Hospital.

At a meeting of the Dallas County Medical Society held December 13, 1921, officers were elected for 1922 as follows: President, J. Y. Smith, Sparkman; Secretary, O. W. Hope, Fordyce.

The Ophthalmic Section of the St. Louis Medical Society announces a course of lectures in Ophthalmology, to be given, in St. Louis, by Professor Ernst Fuchs of Vienna, during the month of February, 1922. Further information regarding this course may be obtained by writing to the Fuchs Lecture Committee, St. Louis Medical Society, 3525 Pine Street, St. Louis, Mo.

The officers of the Arkansas Medical Society realize that to obtain the high average of attendance, at the annual meeting, programs must be intensely interesting and therefore if you INDIVIDUALLY have any suggestions to make for the betterment of these programs, please feel perfectly free to make such suggestions. Try to realize that the suggestion will be more than welcome.

Any one wishing to read a paper before the annual meeting of the State Society in Little Rock must send his title with his name to the chairman of the program committee.

We are requested to say that you must get your title in early as possible so that the program will not be rushed through the press at the last moment, delaying distribution. Papers are requested from any member of the Arkansas Medical Society. We hope this meeting will be fully representative of the profession of Arkansas.

The program committee is as follows: St. Cloud Cooper, Fort Smith, chairman; M. D. Ogden, Little Rock, and William R. Bathurst, Little Rock.

CANCER FATALITIES INCREASE.

Taking into consideration the unusual efforts made in the last few years to arrest the spread of cancer, the immense amount of literature scattered broadcast by health boards and by the special "drives" during the annual "cancer week," the appeals to doctors to note carefully the earliest symptoms of

possible cancerous growth, however slightly indicated, together with the use of radium in the early stages of the disease. It is somewhat discouraging to note, by the latest statistics issued by the Census Bureau, that the mortality rate, instead of diminishing under these efforts, shows an alarming increase from 80.05 per 100,000 of population in 1919 to 83.04 in 1920. The total deaths from cancer in 1920 were 89,000, an increase of 5,000 over the previous year.

It is interesting to note the fact that the northern States have the highest mortality rate and the southern States the lowest. Thus the highest rate is in Massachusetts, 98 per 100,000 of population, and the lowest, 45 per 100,000 in South Carolina. Is it not possible that this geographical or climatic differentiation in the frequency of the disease may afford a new field for investigation of the causes of cancer?

DISCOVERY BY U. S. DEPARTMENT OF AGRICULTURE MAY BE USEFUL AS HUMAN MEDICINE.

The toll exacted from the live stock industry by internal parasites, such as worms, is enormous, and because of this drain on the herds and flocks the zoologists of the United States Department of Agriculture keep up an unflagging search for chemicals and treatments that may be used to combat these organisms. Recently they have discovered that a certain chemical once used in medicine as an anesthetic and now used variously as a fire extinguisher, cloth cleaner, insecticide, and solvent for fats and gums, is very effective as a destroyer and expeller of intestinal worms. The name of this chemical is carbon tetrachloride.

The effectiveness of this chemical against certain round worms has been announced by the department; but what may be the most beneficial use has just been brought out by tests on animals infested with hookworms. In the case of sheep the minimum effective dose has not yet been determined; but all the doses used, from 12 cubic centimeters to 48, in each case given in two ounces of castor oil, removed all stomach worms and all hookworms. It has been equally effective for hookworms in dogs and foxes, and has been used with success against some of the various kinds of worms that infest the digestive tract of pigs.

The fact that a species of hookworm also affects man makes this discovery of the efficacy of this chemical against hookworms in various animals of interest to medical men as well as to veterinarians and live stock growers. Medical men are now trying it out at several places as a possible cure for hookworm disease in man, and it gives promise of success. As a result of the work so far completed, scientists in the Bureau of Animal Industry consider that this drug will prove of special value in the removal of the various kinds of blood-sucking worms in domestic animals.

Obituary.

DR. I. M. POYNER—Isaac M. Poyner, M. D., Berryville, died November 21, 1921, aged 58. He was a graduate of the University of Arkansas School of Medicine and practiced for a number of years in Carroll County.

DR. HARTLEY WEEMS — Hartley Weems, M. D., Fort Smith, age 68, died December 18, 1921. Dr. Weems retired from active practice in 1911. He is survived by his daughter, Mrs. Albert S. Bullock.

DR. B. H. GREEN—B. H. Green, M. D., Warren, age 62, died December 19, 1921. Dr. Green practiced medicine in Warren for thirty-five years. He is survived by his wife and four children.

County Societies.

DREW COUNTY.

(Reported by Stanley M. Gates, Sec.)

At a recent meeting of the Drew County Medical Society the following officers were elected for the ensuing year: President, S. O. Kimbro; Vice-President, A. S. J. Collins; Secretary, Stanley M. Gates.

FAULKNER COUNTY.

(Reported by J. S. Westerfield, Sec.)

The Faulkner County Medical Society met December 15, 1921. Officers for 1922 were

elected as follows: President, I. N. McCollum; Vice-President, C. H. Diekerson; Seeretary-Treasurer, J. S. Westerfield; Delegate, G. L. Henderson; Alternate, C. E. Benefield.

SEBASTIAN COUNTY.

(Reported by W. R. Brooksher, Jr., See.)

The following offieers have been elected for the ensuing year by the Sebastian County Medical Society and will be installed at the annual banquet of the society on January 10, 1922: President, A. F. Hoge; Viee-President, E. C. Moulton; Secretary, W. R. Brooksher, Jr.; Treasurer, H. H. Smith.

GARLAND COUNTY.

(Reported by O. H. King, See.)

At a reeent meeting of the Garland County Hot Springs Medical Society, the following named officers were elected for 1922: President, Grayson E. Tarkington; Vice-President, W. L. Snider; Seeretary-Treasurer, Ossian H. King; Censor; W. T. Wootton; Delegate to State Society, C. E. Garrett, E. A. Purdum, J. M. Proctor; Alternates, E. R. Browning, W. F. Porter, W. V. Laws.

BRADLEY COUNTY.

(Reported by W. S. Ellis, Sec.)

The Bradley County Medieal Society met at 1:00 p. m., December 29, 1921, in Warren and eleeted the following offieers: President, G. L. Wilson, Jersey; Vice-President, C. N. Martin, Warren; Seeretary and Treasurer, W. S. Ellis, Hermitage.

Other members of the society are as follows: W. T. Fike, C. E. Gannaway, W. L. Hartsell, R. Martin of Warren; W. N. Roark and W. B. Reasons of Hermitage.

MISSISSIPPI COUNTY.

(Reported by F. D. Smith, Sec.)

The Mississippi County Medical Society met at Oseeola, Tuesday, Deeember 13, 1921. Members present: Howton, Sheddan, Hudson, McCall, Wilson and Smith. Visitor, Dr. L. D. Massey, Osceola.

Drs. D. C. McLean and L. D. Massey were elected to membership.

The following officers were elected for the ensuing year: President, W. S. McCall; Viee-President, L. D. Massey; Secretary-Treasurer, F. D. Smith; Board of Censors, Drs. Barksdale, Howton and Saliba; Committee on Public Health and Legislation, Crawford, Sheddan and Wilson.

ARKANSAS COUNTY.

(Reported by M. C. John, See.)

The Arkansas County Medical Society met in Stuttgart, January 10, 1922. President R. H. Whitehead in the chair.

Present: Whitehead, Winkler, Winters, Morphew, Neighbors, Swindler and John.

Dr. Morphew read a very interesting paper on "Diphtheria and Differential Diagnosis."

The following officers for 1922 were elected: President, E. H. Winkler; Viee-President, H. B. Winters; Secretary-Treasurer, M. C. John; Delegate to State Society, W. H. Moorhead; Alternate, R. H. Whitehead; Board of Censors, E. B. Swindler, one year; R. H. Whitehead, two years and A. Fowler, three years.

The next regular meeting will be in Gillett.

PHILLIPS COUNTY.

(Reported by M. Henry, See.)

The Phillips County Medieal Soeiety held its fifty-first annual meeting at the Chamber of Commerce January 11, 1922, with Dr. M. Fink, President, in the chair.

After the routine business had been disposed of, the annual eleetion of officers was held, resulting as follows: Dr. Orlie Parker, president; Dr. W. C. King, vice-president; Dr. M. Henry, seeretary and treasurer; Dr. M. Fink, eensor.

Among the out-of-town members of the society today were: Drs. King, Mellwood, Eubanks, Wabash and Parker, Elaine.

Following the meeting a delightful smoker was enjoyed at the Postoffice Cafe.

The society now has a membership of twenty-eight.

JEFFERSON COUNTY.

(Reported by J. T. Palmer, See.)

The Jefferson County Medical Society met in regular session Deecmber 6, 1921, with a good attendance. Eleetion of offieers was held, resulting as follows: President, J. M. Lemons; Viee-President, W. T. Lowe; Seere-

tary and Treasurer, J. T. Palmer; Delegate to State Convention, A. C. Jordan.

In response to a letter received from Dr. J. W. Walker, Secretary State Board of Medical Examiners, regarding contribution from each medical society to assist in taking care of certain expenses incurred by said Board of Examiners, the Jefferson County Medical Society voted to raise the annual county dues to $5.00, which was done and the secretary instructed to forward ten dollars to Doctor Walker.

Several interesting clinical cases were reported and discussed.

HEMPSTEAD COUNTY.

(Reported by L. M. Lile, Sec.)

Hope, Ark., Dec. 8, 1921.—The Hempstead County Medical Society met in the city hall at 8:00 p. m., the purpose of the meeting being for the annual election of officers. The meeting was called to order by the president, Dr. G. E. Cannon, and the following officers elected: President, Don Smith; Vice-President, W. M. Garner; Secretary, L. M. Lile.

Dr. Cannon, the retiring president, was elected delegate to the State Society with J. H. Weaver as alternate.

Drs. Garner, Waddle and Stidham were elected censors and Drs. Cannon, Saner and Lile were appointed as program committee.

A general discussion of topics of interest to the local profession was carried out and at a late hour the meeting adjourned to meet again the second Thursday in January, when an interesting program will be presented.

LAWRENCE COUNTY.

(Reported by A. J. Clay, Sec.)

The Lawrence County Medical Society met at Hoxie, January 4, 1922. Called to order by J. C. Hughes, vice-president.

Present: Guthrie, Hatcher, Hughes, McCarroll, Swindle, Thomas, Townsend, Warren and Clay.

Minutes of previous meeting were read and approved.

The scientific program consisted of reports of clinical cases, namely: "Ascites of Known and Unknown Etiology;" "Breech Presentations and Their Anomalies;" "Delayed Delivery of After-Coming Shoulders With Its Ratio to Mortality."

Installation of officers was conducted by Dr. G. A. Warren, namely: President, W. W. Hatcher; Vice-President, Earl Thomas; Secretary-Treasurer, A. J. Clay; Delegate, J. C. Hughes; Alternate, T. C. Guthrie; Censor, H. R. McCarroll.

PULASKI COUNTY.

(Reported by R. J. Calcote, Sec.)

At a meeting of the Pulaski County Medical Society held December 19, 1921, the retiring President, Dr. Robert Caldwell, delivered the following address:

Fellow Members:

"During the last twelve years I have been a more or less faithful member of the Pulaski County Medical Society and have been twice honored by being elected its President. During this time it has frequently occurred to me that the society has not been of maximum benefit to its members, and has not been doing its full duty to the community which it serves. The society has not encouraged medical research, it has made no effort to keep pace with the advances in medical knowledge, it has taken little interest in the social, political or other public affairs of the city and State, its activities have not been such that the members derive the greatest inspiration and help from their membership, and, it must be stated, the personal and professional relationship between its members has not always been cordial.

"With no criticism of those men who have formed the society in the past, it can be truthfully stated that there has been but little constructive medical work done in Little Rock. There has been no lack of opportunity or lack of facilities, but rather a lack of inclination. Hospitals are available, laboratories are adequate, the city has a medical school with a first-class medical library, and a physician who has any patients at all has the necessary clinical material. Sir James McKenzie did his epoch-making researches on diseases of the heart in a town of less than five thousand in Scotland; our own Dr. Thibault, a national authority on mosquitoes and malaria practices medicine in the country.

"Little Rock falls short of being a real medical center. The territory contributory to the

city is growing smaller all the time. Memphis, St. Louis, Kansas City, and places as far away as Johns-Hopkins and the Mayo Clinic are drawing patients who because of proximity should come to Little Rock. Also several of the smaller towns of the State are establishing hospitals and clinics and attracting patients that would otherwise come here.

"This situation is perhaps the gravest that the medical profession now faces. It can be attributed to a lack of constructive medical research, and to the absence of harmony and co-operation between the doctors and the leading hospitals of the city. There are two solutions to this problem. One is for the physicians of this city to place themselves, by constructive medical work, on a par or ahead of those elsewhere. The second can probably be met best by the encouragement of other first-class hospitals.

"Advances in medical science are being made so rapidly that no man can keep pace with them all. The literature is entirely too voluminous for one individual, in his spare time, to cover it. Most of us have some particular field in which we are especially interested and in which we try to keep up-to-date. This does not mean that there is nothing in our line of work that is not of value to some one practicing in some other field. Would it not be possible to incorporate in our society program a regular place for brief reviews of current medical articles, the total of which would cover practically all the medical specialties? This would give all an idea of the advances being made in medical science and would certainly enable us to care for our patients more intelligently.

"It occurs to me that a medical organization should have, as one of its purposes, the protection of the public from exploitation of unwarranted cures, patent medicines, various cults of pseudo-medical practice, and quacks posing as competent medical men. This purpose has been neglected in the past; it should be given more attention in the future. As a step in the right direction the Arkansas Medical Society through its council has employed an attorney to give legal advice in any case in which the Medical Society is a party.

"The society as an organization has not taken any interest in the political or civic affairs of the community or State. Only a few of the members as individuals have done so. When a member does interest himself in some club or organization other than medicine, too often he is accused by other members of playing to the galleries and seeking glory and honor for his own selfish interests and personal gain. We have many interests that need our co-operation and support, not only as citizens but as men versed in things medical, and to which our expert knowledge could add greater efficiency.

"The volume of work that a man does is no excuse for a lack of interest in the affairs of his community. For a number of years Dr. Howard Kelly of Baltimore has been one of the leaders in civic reforms in his city and State, and, in spite of his defeat as a candidate for mayor of Baltimore, he will no doubt continue his activities for years to come. Dr. Hubert Work of Colorado has become proficient enough both in politics and in medicine to be President of the American Medical Association and first assistant postmaster-general at the same time.

"The attendance at the meetings of this society is not as good as it should be. With a membership of one hundred and twenty-seven, frequently not more than ten per cent are present, and but rarely more than twenty. Some come from a sense of duty rather than because it is profitable for them to attend; some do not attend a meeting from one year's end to the next.

"You may say that you do not attend because the programs are uninteresting. If this be true it is partially your own fault. Those of you who have been chairman of the program committee know that frequently the program is not made up of what you would like to have, but what you are able to get. The society can not be any stronger than the average strength of its membership; and every member should plan to take his part in the program, just as he plans for any other annual or semi-annual event in his business.

"It has often been remarked that lawyers are, to all intents and purposes, the worst of enemies when trying a case; but the best of friends out of the courtroom. We all know that the opposite is true of doctors. When in personal contact they appear to be the best of friends, only to back-bite and knock when they are separated. This I believe to be the greatest fault of the members of the medical profession. The spirit is better in some places

than in others; Little Rock is certainly not better than the average.

"It must be remembered that every knock is a boost, and in many cases the knocker is lowered in the estimation of the person to whom he is talking. Certainly, the medical profession as a whole suffers every time one of its members is treated discourteously by another member. As a result of this practice many people have a poor opinion of the profession, and have more faith in patented pills than in their family physician. Would it not be better for us, when opportunity presents itself, to speak well of the other man, or if we can not or will not do this, keep silent? This resolution, if put into practice at the outset of the coming new year, would, in a very short time, result in an entirely new spirit in this society, and a new attitude of the people of this community toward their doctors.

"In this short address I have called your attention to certain points that I believe this society should consider seriously.

"Briefly enumerated, these are:

"1. The absence of medical investigations.

"2. Lack of systematized effort to follow advances in medical science.

"3. Insufficient interest as a society in public affairs.

"4. Increased interest and attendance at meetings.

"5. A more cordial relationship to each other.

"In closing, I invite your full and free discussion of all the points mentioned."

At the conclusion of the President's address, on motion, duly seconded and carried, the chair was authorized and instructed to appoint a committee to consider the points and suggestions offered by the retiring President, and to report with recommendations at the next meeting of the society. It was also ordered that a copy of the address be sent to every member.

Book Reviews.

THE ROENTGEN DIAGNOSIS OF DISEASES OF THE ALIMENTARY CANAL—Second Edition. By Russell D. Carman, M. D., Head of Section of Roentgenology in the Division of Medicine, Mayo Clinic and Professor of Roentgenology (Mayo Foundation), Graduate School of Medicine, University of Minnesota. Thoroughly revised. Octavo of 676 pages and 626 original illustrations. Published by W. B. Saunders Company, 1920, Philadelphia. Cloth, $8.50 net.

This volume will be of unusual interest to a great number of physicians as roentgenologic examinations of the digestive tract is now recognized as an extraordinary efficient and practical aid to gastro-intestinal diseases.

The book presents in a systematic manner the records and facts as have been verified by experience and a large amount of material.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE—By James M. Anders, M. D., Ph. D., LL.D., Professor of Medicine, Graduate School of Medicine, University of Pennsylvania. Fourteenth Edition, thoroughly revised with the assistance of John H. Musser, Jr., M. D., Associate of Medicine, University of Pennsylvania. Octavo of 1284 pages, fully illustrated. Published by W. B. Saunders Company, Philadelphia, 1920. Cloth, $10.00 net.

This well known work gives to the student the present state of our knowledge of the practice of medicine in general and of the diagnosis, differential diagnosis, and treatments of diseases in particular. Like the other editions especial attention is given the revision to the practical phases of internal medicine. Among the sections which have been entirely rewritten is that of "Influenza." Under "Prophylaxis," Dr. Anders says: "Drugs which have been advised for their preventive effect (quinin and salicin) are devoid of value." Isolation should be carried out in hospitals, and, whenever practicable, in private families. E. W. White has reported an epidemic of influenza that was successfully aborted by strict isolation of the patients. Disinfection of the catarrhal discharges, particularly the bronchial, is necessary. I must also insist upon cleansing of the nasopharynx and mouth cavity. The prevention of droplet infection, is of prime importance. The gauze mask should be worn by physicians, nurses and attendants.

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Original Articles.

INDIGESTION AND DYSPEPSIA.*

Mahlon D. Ogden, M. D., F. A. C. S.
Little Rock.

The terms mentioned as the title of this paper are used so frequently by patients in stating their chief complaint when applying to us for relief that I have for a long time deemed them deserving of discussion.

In conformity with their usual lax application of technical terms, indigestion or dyspepsia may mean to the laity one or more of several symptoms and it is to the consideration of these symptoms that I wish to direct your attention.

The usual symptoms complained of are as follows:

Pain or distress after eating.
Recurrent nausea or vomiting.
Gas on the stomach or bowels.
Belching.
Heart-burn.
Sour stomach.

The one common characteristic of them all being chronicity.

Of the many causes of these symptoms there are four which are found so frequently that, for a diagnosis, they must be first excluded before arriving at the conclusion that we have to deal with one of the less common diseases. I refer to peptic ulcer, chronic cholecystitis, chronic appendicitis and gastric cancer.

By far the great majority of cases of chronic indigestion will be found to fall under one of these four headings, and not infrequently under two of them, as chronic cholecystitis often follows chronic appendicitis and gastric cancer is almost always preceded by gastric ulcer.

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

With these four diseases in view let us consider the symptoms mentioned above. Always bearing in mind that we are leaving out of consideration any acute condition, what are the characteristics of the abdominal pain? Is it acute, or a burning, or just a sense of distress and what is its location?

The pain of peptic ulcer varies from a sense of weight or distress to the most intense suffering and is generally located somewhere in the epigastrium. The pain of a chronic cholecystitis is at first a sense of upward pressure against the diaphragm, of short duration, relieved by belching, and which, in the later stages of the disease becomes a steady ache either epigastric or hypochondriac.

The pain of a chronic appendicitis is not so severe as the foregoing and the complaint is usually of a sense of uneasiness in the right lower quadrant accompanied with a sense of fullness in the epigastrium; equally as often, the abdominal distress cannot be definitely located.

Gastric cancer causes a pain not unlike that of peptic ulcer except that it is more constant and of a steady, boring nature.

An important feature of chronic abdominal pain is its relation to the taking of food. A pain occurring immediately after the ingestion of food is due to some condition outside of the stomach. This is borne out by the fact that in gall-bladder diseases and chronic appendicitis the pain occurs immediately after eating, while in peptic ulcer and cancer of the stomach without obstruction it occurs from one to three hours after meals. Moreover the pain in peptic ulcer is relieved by food or alkalies. Following this dictum, we find that pain occurring late at night is generally due to peptic ulcer, usually duodenal.

The relation of the pain to exercise is worthy of note; for, while almost any kind of abdominal pain is intensified by exertion, the asso-

ciation is nowhere so clearly defined as in the case of peptic ulcer.

Nausea and vomiting are spoken of interchangeably, there being simply a difference in intensity.

There is usually no nausea with non-obstructive peptic ulcer except in those individuals whom any pain nauseates and when vomiting occurs there is relief from the pain. As hematemesis occurs in only 20 per cent of cases of peptic ulcer, its absence is not of much import for a negative diagnosis.

Vomiting is an irregular accompaniment of chronic cholecystitis, but occurs frequently.

In chronic appendicitis there is usually nausea instead of vomiting, and this nausea appears a short time after eating.

The vomiting of gastric cancer, like that of obstructing gastric ulcer, is due to food retention and characterized by the return of food ingested twenty-four or forty-eight hours previously. Carcinoma of the cardia often shows no vomiting. The vomiting of bile is not significant as this occurs after prolonged emesis from any cause.

Gas in the stomach or intestines may occur in any of the four conditions mentioned; but it is perhaps most prominent in chronic cholecystitis causing dyspnea and tachycardia, which are often not recognized by the patient as being due to the flatulence.

Heartburn (pyrosis) occurs most frequently in peptic ulcer and chronic appendicitis and, being due to the hyperacidity, is relieved by the taking of either food or alkalies.

It is not my intention to give a detailed differential diagnosis between these four conditions; but merely to mention briefly some of the outstanding features of each.

Peptic ulcer is characterized by epigastric pain (in early cases without nausea) occurring from one to three hours after meals, made worse by exertion and relieved by the taking of food or alkalies. The regularity of the symptoms is very noticeable. Only one-fifth of the cases have hemorrhage.

Chronic cholecystitis is divided clinically into four stages. The first stage is irregular in time of occurrence, mild and of short duration, and consists of moderate distension by gas soon after eating, with upward pressure against the diaphragm. The second stage is also irregular and exhibits a dull prolonged epigastric or right hypochondriac pain which is increased by food, pressure or exercise. The pain is usually accompanied with nausea.

The third stage is that of gall stone colic, often described by the patient as acute indigestion, which is followed in a small percentage of cases by jaundice.

The fourth stage closely resembles that of gastric ulcer and should be differentiated by the history of preceding symptoms.

Chronic appendicitis differs from peptic ulcer in that the symptoms are much more irregular, and from chronic cholecystitis in that the pain is more prolonged, but not so severe. There is early discomfort and nausea following the taking of food and the discomfort is only vaguely localized about the umbilicus and in the entire lower abdomen.

Gastric carcinoma is a disease of the third decade and later, is preceded by a history of peptic ulcer, generally gives evidence of food retention and in the later stages shows the characteristic cachexia.

In addition to the four conditions mentioned above I will simply recite a list of diseases, any of which usually shows one or more of the symptoms under discussion and it is beyond the scope of this paper to go any further into details. The list is as follows:

Pancreatitis (chronic).
Tuberculosis of lungs.
Tuberculosis of cecum.
Nephritis.
Pernicious anemia.
Cardiospasm.
Myocarditis.
Herpes Zoster.
Visceroptosis.
Migraine.
Tabes Dorsalis.
Pott's Disease.
Syphilis.
Aneurysm.

While the differential diagnosis of the majority of these conditions is perfectly obvious, I might pause here to state, that of all the varied aids to diagnosis in these obscure abdominal diseases, none stands out so prominently as the use of the x-ray; as with it we not only reach our highest efficiency in preoperative diagnosis, but we are also often prevented from overlooking associated and unsuspected conditions.

In conclusion, there are a few points which I wish to stress.

It is not necessary to have vomiting of blood to make a diagnosis of peptic ulcer.

It is not necessary to have gall stone colic or jaundice to make a diagnosis of chronic cholecystitis.

It is not necessary to have pain in the right iliac fossa to make a diagnosis of chronic appendicitis.

And, finally, it is not necessary to have cachexia to make a diagnosis of gastric cancer.

If I have succeeded in emphasizing these negative points in diagnosis and have made obvious the conclusion that there is no such clinical entity as indigestion or dyspepsia, then this paper has accomplished the object for which it was written.

DISCUSSION.

Dr. C. S. Pettus (Little Rock): Indigestion is an interesting condition and we come in contact with it daily.

It is pleasing that we have reached the point in our scientific knowledge to know that indigestion is merely a symptom and in failing to recognize it as a symptom has caused much unnecessary suffering and useless administration of drugs. The past experiences of the patients who were treated by the doctor, who considered indigestion a disease per se, is sad to recall.

I am of the opinion that some of the causative factors of indigestion are also indirectly responsible for the development of Bright's disease, especially appendicitis, the changed condition of the kidney is brought about through disturbed metabolism and toxic absorption.

During my connection with the County Hospital I made special study of indigestion which accompanies Bright's disease. I decided that a diseased appendix might be responsible for it. Reasoning thus, I made a study of the appendix in Bright's disease and decided if a history of chronic appendicitis could be elicited and the appendix removed without shock or unnecessary disturbance to the patient, it would be an advantage in relieving indigestion.

After concluding that the appendix was partly responsible for the indigestion I removed several appendices, under local anaesthetic, of patients having Bright's disease. The relief was marvelous in each instance, assimilation improved, toxic symptoms lessened and indigestion benefited.

Considering the comfort given and the improvement shown, the patient was the benefactor of the procedure, which was gratifying to the patient and to the surgeon.

In many tubercular patients I have found an involved appendix and the removal of this organ gave much the same satisfactory results as just mentioned in Bright's disease.

I have noticed that in pernicious vomiting a history of chronic appendicitis is often given. Almost every case of pernicious vomiting that I have treated gave a history of chronic appendicitis. It has so impressed me that I believe a full investigation of the matter would prove of value to the woman who suffers with this symptom.

Salpingitis is an irritating factor causing indigestion, of which, Dr. Ogden failed to speak. I have noticed that on removing the appendix leaving behind a diseased tube the indigestiou was not relieved; in several cases I have later removed a diseased tube relieving completely the symptom of indigestion.

Dr. H. Thibault (Scotts): A year or two ago I made a statement at Carlisle that there was no such disease as indigestion, and I came near to being mobbed.

What is in the patient's mind when he comes to the office and tells his physician that he has indigestion? He means that he has a discomfort somewhere between the chin and the pubic bone, and it does not make much difference what the discomfort is. Dr. Ogden's paper is of more importance to the general practitioner than anybody else. He doesn't have to worry about the surgeon. He will get the appendix out for vomiting of pregnancy or anything else that happens to turn up (laughter). He is all right. He will look into those things; but, the general practitioner is the man who generally treats these patients for one, two or three or four or six years for some intangible mythical condition that he calls indigestion. There is no such disease as indigestion. The digestive tract works all right, unless there is something the matter with it, or something the matter with one of its neighbors that puts it out of business. Ordinarily a man can digest anything that you can call food, unless he has some physical defect somewhere in him, or there is some idiosyncrasy against or sensitization to that particular food, or unless he ingests some poison, bacterial or otherwise, with it. When he has indigestion, first determine by careful searching, as Dr. Ogden pointed out here, whether or not he is really suffering from indigestion. Then, get the history of his particular trouble, and locate the trouble as a physical entity, and not as that intangible thing that we treat with dieting. That is nothing. The only way to do is to find out the tangible thing.

I certainly agree with the essayist that the x-ray has been the most important adjunct to our diagnosis in these cases. Before we became proficient in the use of the x-ray in abdominal examinations, we depended absolutely on the history of the case, and some people did not give you a very good history, even when you pinned them down with one question at a time. But, with a good history, though, and the addition of an x-ray examination, we can very often find the offending point, and we always find that it is a physical entity.

Just to illustrate. I saw a case last week that had had indigestion for three years. The patient had lost flesh. A careful examination of that abdomen showed hydronephrosis on the right side, and a nodular irregular ureter, which was blocked up by what was probably a malignant growth at its lower end. This patient suffered severely from indigestion for three years, and lost flesh. And, even a casual examination of the abdomen revealed the fact that there was a physical condition there that accounted for it, and that patient has taken all kinds of digestive aids and has been put on the strictest kind of diet, and, of course, it has done no good.

Dr. E. F. Ellis (Fayetteville): I think Dr. Ogden's paper is a most valuable one. There is one point I think that he overlooked in the paper, and that is the fact of a routine chemical and microscopical examination, a chemical examination of the urine and a microscopical examination of the blood, including the white cell count, etc. These tests will often throw a great deal of light on your abdominal cases.

Dr. Ogden (in response): I was discussing principally in this paper the history of the case of the patient that came to us complaining of indigestion. I was assuming that any patient coming to any doctor, complaining of those symptoms, would have the

benefit of at least some sort of routine examination. That was the reason that I laid so little stress or practically none on Bright's disease and some of the other constitutional diseases as a causative factor in indigestion. As Dr. Ellis very aptly states, if they come complaining of indigestion, before you make your diagnosis, you have an examination of the urine made, and you are not going to overlook chronic nephritis as a cause of this almost constant nausea. In fact, the constant nausea, a nausea that will last twenty-four hours, four, five or ten days in succession, is most frequently due to chronic nephritis. And, if we use care in the examination of that patient, we are not going to make a mistake of going in after the gall bladder and appendix or make an exploratory incision to relieve his symptoms.

Dr. R. C. Dorr (Batesville): May I ask one question? How about gall bladder trouble or a chronic gastritis?

Dr. Ogden: In what regard?

Dr. Dorr: In producing indigestion, if you want to call it that.

Dr. Ogden: It produces it.

Dr. Dorr: Will gall bladder trouble produce it?

Dr. Ogden: Yes.

Dr. Dorr: Or any number of other causes.

Dr. Ogden: Yes. I devoted part of the paper to a consideration of gall bladder trouble as a factor in the production of indigestion. It is possible, in connection with what Dr. Thibault says about leaving it to the surgeon and he will cut in and find out which it is, that the real surgeon will not do that. The real surgeon will go to just as much trouble to diagnose that case before hand, with his history and the x-ray and various other examinations, as the general practitioner, or the internist. And, when the surgeon goes into the abdomen and finds something that he didn't know was there, why, there is something to be explained. It is either some unusual condition that does not give rise to symptoms outside, or he has not made an adequate examination. I mentioned, in connection with the x-ray examination, that very frequently we will confirm perhaps by the x-ray a suspicion as to the cause of the set of symptoms. And, in addition, it will disclose some associated condition which is oftentimes relieved. For instance, your x-ray examination will show possibly a gall bladder adherent to the duodenum. If we want to stop there, that is enough to account for the symptoms of which the patient complains. But, the examination will further show that the ascending colon in many instances is bound down by adhesions, giving rise to the most obstinate form of constipation. Now, in going into that case, if the gall bladder is removed and the conditions surrounding the gall bladder are relieved, you will relieve the patient of a great many of his symptoms of indigestion. But, you may leave him still with his obstinate constipation. But, if you know beforehand that you have a constriction further down, a little band going across part of a pericolic membrane, the so-called Jackson membrane, one little snip will often release it, and you have relieved your patient then of another symptom which you would not have suspected, and in all probability would not have been found in the course of your abdominal operation.

"SOME PHASES OF ACIDOSIS."*

A. C. Kirby, M. D., Little Rock.

In this paper I will only give some of the more essential phases of acidosis, especially as it applies to diabetes mellitus, intestinal intoxication and nephritis. I am greatly indebted to Howland and Marriott, having freely made use of their article on acidosis, which appeared in the Pennsylvania Medical Journal, April, 1918. Also to Chace and Myers on their article on acidosis and nephritis, Journal of the A. M. A. (74:641) March 6, 1920.

The meaning of acidosis, as summed up by Howland and Marriott, is as follows: "During the course of normal metabolism acids in considerable amounts are produced: Carbonic, phosphoric and sulphuric, as well as certain organic acids. The body possesses such an efficient mechanism for the neutralization and elimination of these acids that under ordinary circumstances, the reserve alkalinity of the blood and tissues remain at practically a constant level. An excessive intake of acid, and excessive production of acid within the body, or a failure of any part of the defensive mechanism, results in an increased activity of the defenses of the body against acids and, to some extent, to a depletion of the alkali reserve; or, in other words, acidosis. The condition of acidosis may therefore be recognized by the increased activity of defensive mechanisms and by findings of the depletion of the alkali reserve.

The defensive mechanisms of the body against acids are:

"First and most important, the sodium bicarbonate or alkali reserve. The blood and tissue juices may be considered as a solution of sodium bicarbonate of a strength of about 0.3 per cent. This solution circulating throughout the body comes in contact with and absorbs the excess carbon dioxide formed by the body tissues. This renders the solution slightly less alkaline, as carbon dioxide acts as a weak acid. In the passage through the lungs this carbon dioxide taken up is removed by pulmonary ventilation and the blood again becomes more alkaline. If an excess of carbon dioxide is formed, as after exercise,

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

then the ordinary pulmonary ventilation is unable to get rid of the excess at once, and so we get increased depth of respiration. This is caused by the slightly less alkaline blood acting on the respiratory center, and it is by this increased pulmonary ventilation that the excess carbon dioxide is thrown off by the body and the blood returns to its original reaction.

"Now, if acids get into the blood stream, for example, b-oxybutyric and acetoacetic, a certain part of the bicarbonate is neutralized, carbon dioxide is set free, respiratory depth is increased, the excess dioxide is removed, as noted before, and the blood returns to its normal reaction. However, that part of the bicarbonate which was used to neutralize the acids becomes unavailable and this results in a weaker solution of bicarbonate. Suppose one-half of the bicarbonate of the blood had been neutralized then only one-half as much carbon dioxide can be carried by the blood as before; provided, the reaction remains the same. If the respiratory ventilation is doubled, the dissolved carbon dioxide in the blood will be removed approximately twice as fast, and the blood will remain at practically its former reaction.

"Thus, this increased pulmonary ventilation serves to prevent a significant change in reaction of the blood; but it can not prevent the depletion of the bicarbonate reserve of the blood, and it would eventually be entirely exhausted, were it not for other means of defense.

"So we come to the second line of defense, the ammonia formation:

"When there is an increase in the production of acids in the body ammonia production is also increased. This ammonia unites with the acids to form salts which are excreted by the kidneys. By uniting with the acids much of the sodium bicarbonate is prevented from being neutralized and thus lost.

"The third line of defense is the ability of the kidney to excrete acids.

"The phosphates of the blood play the important part under this head. Normally the kidney excretes a very small amount of free acids; but considerable amounts in the form of the acid phosphates. The phosphates as they are found in the blood are for the most part the alkaline phosphates; the kidneys by their specificity of action change part of the alkaline phosphates to the acid phosphates, the base thus spared helps to replenish the bicarbonate reserve. The phosphates of the blood and plasma are low for the kidney is continuously excreting both acid and alkaline phosphates. When there is a necessity for excreting more acid the kidney responds by excreting a more acid urine. However, there is a limit to the production of acid excretions and a urine very much more acid than is excreted normally will not be eliminated by the kidneys.

"The fourth line of defense is the blood and body proteins. These are able to take up considerable amounts of acids of alkalies without marked changes in reaction. This plays a relatively minor role in the prevention of acidosis.

"The diagnosis of acidosis: The clinical manifestations are restlessness, sleeplessness, excitement and later a tendency to prostration, somnolence and coma. However, the only symptom which may be considered pathognomonic of acidosis is hyperpnea, deep breathing or the air hunger of 'Kussmal.' This consists in a remarkable alteration of breathing with deep and exaggerated inspiration and expiration; usually not increased in rapidity, but constantly present. As noted by Howland and Marriott,[1] "It differs markedly from the shallow rapid respiration of pneumonia and from labored breathing of obstruction. There is no cyanosis except when acidosis occurs in the presence of cardio-respiratory disease. Vomiting is not a symptom of acidosis."

Laboratory Tests.

Even with the most typical cases the laboratory tests are advisable to confirm the diagnosis, so the most important will be mentioned. First, the determination of the bicarbonate reserve of the plasma by Van Slykes'[2] method. This test is the most accurate; but best carried out in hospital practice, as the apparatus is not readily portable and considerable skill is required as to the technique.

Second, the determination of the carbon dioxide tension in the alveolar air by Marriott's method.[3]

This method is applicable to bedside diagnosis and may be carried out readily on children and adults, also on infants, but with slightly more effort. It consists of breathing

into a bag, as is done in certain types of gas anesthesia, and then determining the carbon dioxide tension of this air by colorimetric methods. These are easily carried out.

As Marriott[3] points out, certain conditions other than acidosis may affect the carbon-dioxide tensions. "Stimulation of the respiratory center leads to increased pulmonary ventilation and a consequent lowering of the carbon-dioxide tension. Such stimulation may be brought about by caffeine and possibly also by intracranial lesions. The respiratory center may be depressed by morphine: This leads to an increased carbon dioxide. In diabetes, especially after treatment with alkalies, and during periods of partial starvation, the alveolar carbon dioxide tension may be lower than would be expected from the bicarbonate reserve of the blood."

"Changes in the pulmonary epithelium, such as would prevent the air in the lungs from coming in equilibrium with the blood in the capillaries would, of necessity, effect the composition of the alveolar air. Since very little is known as yet regarding the effect of such changes one is hardly justified in drawing conclusions regarding acidosis from the composition of the alveolar air in patients with pulmonary affections." As the sources of error are readily ruled out, it follows that in the majority of cases of acidosis the determination of carbon dioxide of the alveolar air is sufficient and recourse should more often be made to this test.

The third test is the alkali tolerance test of Sellard's.

This consists of giving enough alkali until the urine becomes alkaline to litmus. Normally, two or three grams is enough to cause the urine to become alkaline in infants and five grams in older children and adults. In acidosis often five, ten or even twenty times this amount is required. The test is not entirely free from danger and especially in the acidosis of nephritis.

Fourth, the determination of the acetone bodies in the urine. This test is especially useful when dealing with cases of diabetes mellitus; but the finding of the acetone bodies acetone, acetoacetic and b-oxybutyric in the urine is not sufficient without other evidence of making a diagnosis of acidosis. The acetone bodies occur very frequently in sick children and especially those cases of temporary inanition and starvation; nor is the absence of the acetone bodies evidence that acidosis is not present.

Fifth, is the ammonia coefficient test.

Where there is an abnormal formation of the organic acids or ingestion of the strong mineral acids the body forms ammonia to assist in neutralizing these acids. The excretion of ammonia under these circumstances is increased and is of considerable importance in condition of diabetes mellitus and pernicious vomiting; and the amount excreted is a fair indicator of the amount of acids being formed. This test does not apply in nephritis, for under this condition there is no increase in the ammonia excretion and may be distinctly lower than normally.

The types of acidosis as it occurs in diabetes mellitus, nephritis and gastro-intestinal intoxication and as it applies to these will now be discussed. However, as acidosis occurs in other diseases, a few of the most important will be mentioned. The acute infections are at times accompanied with severe acidosis and in cases of cyclic or recurrent vomiting acidosis due to the acetone bodies may occur. Infants, as noted by Howland and Marriott[1] in their paper, often suffer from very severe attacks of recurrent acidosis in which vomiting plays a very minor role. There may be a slight diarrhea present, but it is the manifestations of acidosis that dominate the picture. The surgeons are familiar with the cases that follow anesthesia. Then, there are those cases in which the carbon dioxide is not eliminated, due to some fault of the lungs or heart; and there is a type which occurs in labor pneumonia which is due, according to Palmer'[4] to an organic acid of unknown composition. These are merely mentioned as types to be thought of.

Prognosis.

The prognosis of acidosis, as summed up by Howland and Marriott,[1] depends upon the cause as well as upon the severity of the acidosis and also upon the underlying conditions. "To cure the acidosis is not necessarily to cure the disease of which the acidosis is a complication: In general it may be said that the acetone bodies offer the best prognosis. With diabetes the prognosis is bad on account of the incurability of the fundamental condition." "In nephritis even

a mild degree of acidosis is much more serious and it is more serious in chronic than in acute nephritis.'' When acidosis occurs in the course of diarrhea it adds a very dangerous complication to an already serious condition. With acidosis of a severe grade, in such cases, recovery is unusual.''

The acidosis of diabetes mellitus. This is the type of case in which acidosis was first recognized and which has been the most thoroughly studied. It is due to an over production of the acetone bodies, b-oxybutyric, acetone, acetic acid and acetone. The source of these bodies are for the most part from the fat and to a lesser extent from the proteins.

The treatment is essentially dietary. The alkali therapy, which was once so generally advocated, is being more and more discarded. Joslin[5] uses it rarely except as an emergency measure and then it is given intravenously. Water in rather large amounts together with the salts are given and by elimination milder cases of acidosis are overcome.

The acidosis of gastro intestinal intoxication. There is a type of case with which you are all familiar and is known by various names, such as ''Gastro-intestinal intoxications,'' ''Toxocosis,'' ''Anhydremia,'' ''Cholera infantum,'' etc. It is not my purpose to go into the treatment of this condition except in those cases in which acidosis accompanies the condition; and it by no means accompanies all cases. Even those with very severe diarrhea often escaping; but when it occurs it is very serious and usually a fatal complication.

The cause of acidosis as it occurs in this disease has not been definitely determined. Howland and Marriott[6] found that acidosis was not caused by an overproduction of acetone bodies—for though at times moderately increased at others they are within normal limits. They also found in many of those cases which have oliguria or anuria that there is a marked increase in the phosphoric acid of the blood and the phosphates under these conditions cause the acidosis. However, there are other cases under seemingly the same conditions which show no increase in the phosphoric acid. Possibly eventually other substances will be found which cause the acidosis. Marriott[1] considers many of these cases in virtually a state of uremia as a result of the functional failure of the kidneys.

Treatment.

Treatment may be summed up as follows:

First, to prevent the acidosis.

Second, to replenish the alkali reserve.

Third, to eliminate the acid and their salts.

To prevent the acidosis the initial starvation, keeping up the body fluids and the gradual addition of the food are the important measures.

To replenish the alkali reserve, sodium bicarbonate is the best drug to employ. This may be given by mouth, by rectum, or intravenously. By mouth, fifteen to sixty grains are given every two hours until the tests show the alkali reserve has become normal.

If the drip method per rectum is used, not more than a two per cent solution should be given and often this is so irritating that it is impracticable. When the intravenous method is resorted to a four per cent solution of sodium bicarbonate made up from freshly distilled water, which is first boiled then cooled and the soda added directly to this. It was pointed out by Oscar Schloss that bulk bicarbonate is always sterile. In infants fifty to one hundred cc. are injected and in older children up to three hundred cc. Larger amounts are dangerous; as acute dilatation of the heart or other circulatory damage may result. The injection may be repeated if necessary. When massive doses are given the younger children, tetany or convulsions may result; so it is best, in order to prevent convulsions, to give at the same time magnesium sulphate subcutaneously, five to ten cc. of a ten per cent solution being injected.

To eliminate the acid and their salts. ''In all forms of acidosis water is urgently required for the elimination of the acids whether neutralized or unneutralized.''[1] Water is to be given by mouth in as large quantities as can be borne. When vomiting prevents this method, then we have to resort to either the rectal, the intravenous, the subcutaneous or the intra-peritoneal injection. ''If diarrhea is present, or the rectum is intolerant, rectal injection is out of the question.'' The intravenous injection of normal saline is impracticable; as only small amounts can be injected and must be repeated so frequently. The subcutaneous saline injection is very good; but it is difficult to give enough salt solution by this means, especially to the younger infants.

With these the intraperitoneal injections is the method of choice. Two to three hundred cc. may be given with aseptic precautions to very small infants by this method, and may be repeated from four to eight hours, or until the body fluids are replaced.

Acidosis in nephritis. Acidosis may result either from an abnormal formation of acid substances, or by failure of the kidneys to excrete normally formed substances. It has been pointed out that the ability of the kidneys to excrete acid, especially acid phosphate, is one of the chief defensive mechanisms of the body against acidosis; so if the kidney is unable to eliminate the acid either due to an over-formation of the acids, or to an inability of the kidney to excrete the usual amount of the acid, on account of a diseased condition, acidosis will result.

Chase and Myers[7] stated in their paper: "All fatal cases of chronic nephritis with marked nitrogen retention show a severe acidoses, sufficient in many instances to be the actual cause of death and that in some cases of acute nephritis an acute exacerbation." They pointed out that the cases showing a two-hour phenolsulphone phthalein test of below thirty per cent for the most part show an acidosis: while those above thirty do not. However, if there is a severe toxemia, even with the color test above thirty, acidosis may be present.

No acetone bodies are found in the urine and the ammonia is normal or diminished in the acidosis due to nephritis. Henderson and Palmer[8] point out that the failure to produce ammonia to neutralize the retained acid is an additional factor in the production of the acidosis of nephritis, and represents a weakening of another of the bodies defenses.

The prognosis where acidosis occurs in nephritis is very serious. It is better in the acute than in the chronic cases.

Treatment.

Treatment besides the dietary bleeding, transfusions, etc., is a judicious use of sodium bicarbonate. Palmer and Van Slyke have found that taking forty-two pounds as the unit of body weight 0.5 gram of sodium bicarbonate will raise the plasma carbon dioxide one per cent by volume. On this basis, and by use of the Van Slyke apparatus, they calculate very accurately the amount of sodium bicarbonate the patient requires.

Chase and Myers[7] warn against the indiscriminate use of sodium bicarbonate therapy; for if the kidneys fail to throw off the other poisons formed, they state the kidneys would be unlikely to throw off the salts formed by the alkali therapy and these would accumulate to an abnormal and possibly highly dangerous concentration in the blood and tissues. They use only moderate amounts of alkalies; but endeavor to promote diuresis by giving as large quantities of fluid as is considered safe either by mouth, under the skin or Murphy drip. Glucose may be added both as an available fluid and for its powerful diuretic effects. Woodyatt[7] states that the diuretic effect of glucose comes only when a hyperglycemia is produced; so at times the glucose has to be given intravenously to accomplish this.

(1) Howland and Marriott, Penn. Med. Jour., April, 1918, volume XXI, p. 429.

(2) Van Slyke, Jour. Bio. Chem., 1917, volume XXX, p. 347.

(3) Marriott, Jour. A. M. A., 1916, volume LXVI, p. 1594.

(4) Journal Exp. Med., 1917, volume XXVI, p. 495.

(5) Joslin, Treatment of Diabetes.

(6) Howland and Marriott, Amer. Jour. Dis. Children, 1916, volume XI, p. 309.

(7) Chase and Myers, Jour. A. M. A., volume 74, No. 10, March 6, 1920.

8. Henderson and Palmer, Arch. Int. Med., 1915, volume XVI, p. 109.

DISCUSSION.

Dr. Noble D. McCormack (Fort Smith): I have enjoyed Dr. Kirby's paper very much. Acidosis is such a big subject that I shall not attempt to discuss the whole thing; but I am interested in it especially as it occurs in children. I want to emphasize two or three points that Dr. Kirby brought out, viz.: that acidosis can occur without the presence of any acetone bodies in the urine; also, that the presence of acetone bodies in the urine does not always indicate an acidosis. Of course, acidosis in infants, especially, is chiefly caused by severe diarrhea; but acidosis can occur when no cause whatsoever can be found to explain it. So, as the treatment is always the administration of sodium bicarbonate, I want to emphasize the necessity of giving sodium bicarbonate to all infants that develop diarrhea, whether the diarrhea seems to be severe or not; because they can so quickly go into an acidosis, and, when they do, they are so hard to cure. An infant is much harder to cure of an acidosis than an older child. There seems to be no real explanation, but there is something about the process so damaging that they can not recover.

I think one interesting point Dr. Kirby mentions is that the sodium bicarbonate solution might be made from fresh distilled water, and does not need boiling. I remember when I was an interne we always used a boiled solution; but he mentions that it is not necessary to do that, as the sodium bicarbonate solution is bactericidal. I want to emphasize that one point chiefly, that the administration of sodium bicarbonate to all infants with diarrhea is essential in the prevention of acidosis.

Dr. J. G. Eberle (Fort Smith): Dr. Kirby has given us a very complete resume of the treatment and diagnosis of this interesting, but dreaded contion, and there is only one point that I want to dwell upon. He said in his paper that vomiting was not one of the cardinal symptoms of acidosis; but it is one of the symptoms that we have to contend with, and so often have to contend with with so much difficulty.

The treatment with the bicarbonate of soda is accepted as the proper treatment; but I feel that we do not realize fully, or do net dwell enough upon the question of how we shall give the bicarbonate. We can not get results oftentimes by giving it via the stomach, because of the incessant vomiting. I wonder why the intravenous injection is not more often relied upon and more promptly used. I think that is the means we have of getting quick results, and oftentimes that is the only means by which we can give the alkaline treatment.

Dr. H. Thibault (Scott): The first gentleman to discuss this paper said that acidosis was a very broad subject. That is the most unfortunate thing about it. It is particularly broad in those cases where insufficient care has been taken in making the diagnosis. Acidosis is probably, in all cases, merely a symptom of some infection. It has now gotten to exactly the place in medical practice that congestion did about twenty years ago, and that autointoxication did about fifteen years ago. The patient looks like he is going to die, and you don't know what's the matter with him, and you say he has got acidosis. (Laughter.) It is perhaps excusable in some of us that haven't sense enough to make a diagnosis ourselves, that have not the laboratory facilities and too far to call for help from the man that has. Still, I don't believe that it warrants the alkalinizing of our patients regardless. Whenever they have diarrhea, or vomit a little bit, or turn their heads from side to side, or have a little deep respiration, we ought to go a little bit further into the subject ourselves. One of the greatest drawbacks to the dissemination of medical knowledge is the fact that sometimes these things become fads for a while. We overdo it. We adopt the treatment, and then we drop it.

However, the subject is important, and, if pursued along right lines, with a careful diagnosis wherever possible, and the treatment guarded, not wholesale—I don't believe in the wholesale giving of bicarbonate of soda any more than I do the wholesale giving of quinine during the summer months, or any other line of treatment, until you have made a diagnosis; then I think it is all right.

Now, the essayist mentions one thing, and that is the withdrawing of food as the beginning of the treatment in acidosis. It is a good idea to guard that procedure, especially in diabetics or nephritics. But, sometimes the most profound acidosis is precipitated by the sudden withdrawal of food. It is a good idea, if possible, to guard this withdrawal by a careful blood examination, especially of the bicarbonate reserve, and, in cases of nephritis, where the examination of the urine is not of any benefit for diagnostic purposes, it is always necessary. It is necessary to have a blood examination for the bicarbonate reserve, especially for the urea and the ammonia index of the blood, in those cases of nephritis where we contemplate any sudden and violent medical treatment, and especially when we are going to add to the blood stream another element to be eliminated by the already crippled kidney. (Applause.)

Dr. N. D. McCormack (Fort Smith): The gentleman who just spoke said he didn't believe in alkalinizing his patient until he made a diagnosis of acidosis. The point that I was trying to make was that the administration of the alkaline before acidosis occurs would prevent the acidosis; and, for that reason, you might make a diagnosis for a condition that was not present. I can see no harm in administering alkalines in small doses sufficient to prevent acidosis. The good done by preventing the development of acidosis in a few babies by the early administration of soda bicarbonate, will far outweigh any harm (if there be any) caused by administering it unnecessarily.

Dr. Kirby (in response): As far as giving sodium bicarbonate to cases of diarrhea, I think that depends a good deal on the severity of the case. In the beginning of these mild diarrheas, I would not advocate giving it; but, if you have a severe diarrhea, such as intestinal intoxication, where you have say ten or twenty watery stools a day, then you are playing safe to give it.

As far as the intravenous method being used is concerned, it often has to be resorted to, and sometimes is the only method you can use, for if you give it under the skin, you are very apt to get sloughing, and if not sloughing, you get a very severe reaction from it, and in that way it keeps the baby awake, and does more harm than it does good.

THE NEWER MEDICINAL CHEMICALS.

On Friday evening, January 6, Dr. Alfred S. Burdick, president of The Abbott Laboratories, Chicago, delivered an address before the Chicago Branch of the American Pharmaceutical Association, on the "Newer Medicinal Chemicals." The rapid growth of American chemistry through co-operation of all research agencies in this country, was emphasized by the speaker.

Concrete examples of American achievements in synthetic chemistry were recited, and a plea made for the support of the medical and pharmaceutical professions to preclude the possibility of our again becoming dependent upon foreign sources for chemical supplies. The history of Arsphenamine, Barbital, Cinchophen, Neocinchophen, Chlorazene, Procaine, the Benzyl Esters and other synthetic medicinal chemicals was outlined. Announcement was also made of a number of new chemical bodies recently developed, and others on which research work was now being done by The Rockefeller Foundation, various universities, the American Medical Association and The Abbott Laboratories.

In conclusion, Dr. Burdick urged both physicians and pharmacists to prescribe and dispense medicinal chemicals by the newer American names, rather than to perpetuate the pre-war dominance of foreign synthetics. This position was supported by the Council on Pharmacy and Chemistry of the American Medical Association, in whose laboratories American medicinal products have been analyzed and found to be equal and in some cases superior to foreign made products.

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All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

WARFARE ON TUBERCULOSIS BRINGS RESULTS.

For years the medical profession has been making scientific warfare on the white plague. For years the results were not wholly encouraging. The vital statistics did not show a reduction in fatalities commensurate with the efforts put forth. Then the Red Cross made the dreaded T. B. a vital part of their work. The sale of Red Cross seals preceding each Christmas brought funds into the society to be devoted exclusively to the cause. State, county and city health societies took up the work. Not only was treatment given and nurses supplied, but the people were taught that sanitation, isolation of patients as much as possible, measures to prevent contagion reaching healthy persons, anti-spitting ordinances were adopted, the people instructed as to the perils of contagion contained in the sputum indiscriminately scattered in public places, on street cars, in theaters, depots and wherever there are public gatherings. Slowly, at first, results of this continued and intelligent assault on the enemy began to appear until the recent statistics by the Census Bureau show real tangible improvement in the situation. In fact in the registration area the figures for 1921 show the mortality almost cut in half as compared with 1920. Last year the mortality was only 110,000 against 220,000 in 1920. This is a wonderful showing and encourages hopes of the elimination of the dread disease just as yellow fever throughout the United States and Cuba, its former hotbed, has been eliminated and malaria also wherever experiment stations have been operated by the Federal health authorities.

With this encouraging result of the T. B. campaign lasting throughout several years and still maintained at full strength, there is some hope of conquering that other plague, cancer, despite the discouraging report of an increased mortality last year.

AND NOW, LET US ALL GET BUSY.

Referring again to the meeting of the Pulaski County Medical Society held December 19, 1921, the retiring president, Dr. Caldwell, actuated by a sincere desire to advance the interests of the society as a whole, suggested that it had fallen short of its duties to the

community, by being lacking in constructive and research work and derelict in attending the meetings.

Note the prompt results. Drs. D. A. Rhinehart, Dewell Gann, Jr. and J. B. Dooley were appointed a committee to consider the paper of Dr. Caldwell and report thereon. At the meeting January 23, they were ready with a full and intelligent report together with recommendations to rectify the shortcomings charged by the retiring president. And, as another direct result of the gentle chiding, the attendance showed a notable improvement.

The committee, evidently agreeing with Dr. Caldwell that there is laxity in medical research, suggested that a special committee be appointed to keep before the society and its members this phase of the work; and, as an incentive, that a gold medal be conferred on the member who contributes the best paper on an original subject to a recognized medical journal during the year, the award to be made by vote of the membership. Recognizing the fact that really original papers are rarely offered before the society, but that many of them, while valuable as such, are based on the literature on the subject, plus the experience of the observer, rather than as emanating directly from the personal experience, the committee suggests the award of a second gold medal to the member, preparing the best original paper to be read before the society during the year.

The committee recommends that reviews of literature on recent advances in medical science find a place on the programs; that the society take a more active part and interest in civic reforms; that physicians observe the proper spirit of courtesy toward fellow practitioners, never speaking slightingly of the honesty or ability of other physicians, either to laymen or, confidentially, to brother practitioners.

As to the matter of poor attendance the committee properly derides the old alibi of the absentees that "the same old crowd is running things." In any society, any lodge, any church, any organization whatever, whenever from any cause attendance slackens it is the "same old crowd" that keeps the organization together. But for the "same old crowd" it would die the death. The remedy if one does not like the "same old crowd" is to attend, take an active part in the affairs of the organization and take matters out of the hands of the "same old crowd." As was pointed out in last month's journal, a large attendance is essential to the continued activity of any organization under the sun. No competent, able member is going to waste his ammunition on a mere handful of members. Discussion is likely to be tame if there be only the "same old crowd" to take part in it. Poor attendance always results in meetings that are "dry, stale and unprofitable" in the very nature of things. Every member should be notified of the date of the next meeting; but, in addition, every member with the good of the society at heart, should, when meeting a fellow member on any day shortly before a meeting, take the trouble to remind him of it and urge him to attend. There are organizations in Little Rock which have telephone committees with a chairman and several members, dividing the work of calling up all members a day or so before the next meeting. This makes the member feel that the society wants him, needs him, and will appreciate his help. Get the members to attending regularly and soon you will note the improvement in the quality of the programs.

Pulaski County, the most populous in the State, has a large membership in its medical society. Dr. Caldwell charged that frequently the attendance did not represent more than ten per cent of the nominal membership and seldom more than twenty per cent. This is all wrong.

Pulaski County should be a model for, and the leader of, all the other societies in the State. Numbers give strength and the society should be a real factor, not only in medical but also in civic affairs. The committee is to be congratulated for its prompt and elaborate report, the intelligent suggestions made to rectify conditions of the past and the society is to be congratulated upon its action in adopting the report and appointing the committees suggested to put the recommendations into effect. Let us all pull together to achieve the desired results.

Editorial Clippings.

LESLIE'S ON CHIROPRACTIC.

There is no information which the public needs more than that which will reveal the actual character of the claims made by certain medical cults—chiropractic in particular. This information is now forthcoming through

a series of articles addressed to the public. Six articles entitled "Is It Chiro-*Quack*-Tic?" by Severance Johnson are now running in Leslie's Weekly, two installments having appeared in the issues for January 7 and January 14. The medical profession has from the beginning recognized the ridiculously unscientific character of the claims made by these cultists and has repeatedly shown that chiropractors are working directly against public welfare; that they attempt—and with some success—to break down medical practice laws, and frequently and openly violate these laws, aided and abetted in doing so by the so-called colleges that are grinding them out. But the public also has large financial interests at stake. Public funds are now being appropriated to help educate competent medical men. To conduct a medical school today costs several times what the institution receives from students' fees, and this deficit is being offset either by State appropriations or private endowments. The expense is being further added to by a gradually increasing provision for scholarships for deserving students who are unable to pay tuition fees. Are the benefits of these expenditures to be lost or dissipated through the spread of chiropractic? Because of the great expense involved in training competent physicians, medical schools conducted for profit have practically disappeared. But the place of the old, low-grade, commercially conducted medical school is now being taken by chiropractic schools. Within a score of years, by charging maximum fees for a minimum of education, a long-haired but shrewd advertiser has amassed millions[1] through conducting a chiropractic "college." A comparison of the brevity of the "professional" course and the common school education, required for admission, with the ten or eleven years of high school, collegiate and professional instruction required to develop a competent practitioner of scientific medicine should at once show the inadequacy of the training obtained by chiropractors. The manner in which chiropractors disclaim the need of diagnosis and flout the fundamental sciences of chemistry and bacteriology should reveal to any intelligent layman the utter unreliability of chiropractic as a system of healing. It is high time that the public became fully informed in regard to the workings of this organized system of quackery, and Leslie's Weekly is rendering the public a great service by publishing the information.—*Journal, A. M. A.*, January 14, 1922.

1. Dock, George: A Visit to a Chiropractic School, J. A. M. A. 78:60 (Jan. 7), 1922.

Communications.

To the Members of the Arkansas Medical Society:

At the last meeting of the Arkansas Medical Society a constitutional amendment was passed providing for a Committee on Scientific Exhibit. This committee is to provide, at annual meetings, an exhibit made up of material of scientific interest to the members of the society.

Pathological specimens, case records, photographs, microscope slides, x-ray plates or films, material illustrating disease prevention and public health work; in short, anything of scientific interest to the medical profession properly belongs in such an exhibit and space will be provided for it. Particular prominence will be given anything illustrating papers read in the scientific sessions of the meeting.

The committee addresses this open letter through the columns of the journal to the members of the society asking the assistance of each individual in making this feature of the coming meeting a marked success.

Communications concerning the exhibit may be sent to the chairman or to that member of the committee who lives nearest. Material for the exhibit should be sent to the chairman, or to Dr. C. E. Oates, Old State House, Little Rock.

D. A. Rhinehart, Chairman, Little Rock,
W. V. Laws, Hot Springs,
J. D. Southard, Fort Smith,
C. E. Oates, Little Rock,
Committee on Scientific Exhibit.

Personals and News Items.

Dr. Floyd Clardy has moved from Jonesboro to Hot Springs.

Dr. J. P. Sheriff has moved from Barringer to Calion.

Drs. L. Kirby of Harrison, E. H. Thompson of Fort Smith and A. B. Tate of Atkins, visited in Little Rock last month.

Dr. Lincoln Humphreys, Medical Corps, U. S. Navy, formerly in Washington, D. C., is now located at the Naval Station, Tutuila, Samoa.

Dr. Morgan Smith, dean of the University of Arkansas School of Medicine, announces the resumption of the junior and senior years upon completion of the new City Hospital and the Baptist Hospital.

Dr. T. B. Bradford of Cotton Plant, announces that March 17th will be "NO TOBACCO DAY" in the schools of Arkansas. The closing hour of that day will be given to the telling of the evils that arise from the use of this product by any one, especially to the YOUTH.

Doctor, have you paid your State Medical Society dues for 1922? We very much desire to send your name to the American Medical Association and the Southern Medical Association as a member in good standing. See your local Secretary at once about this.

THE ST. LOUIS MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

The May meeting of the American Medical Association at St. Louis promises well toward being the largest in attendance of any of the association's sessions. Since the publication of the hotels in the journal of the association in December, inquiries and reservations are being made daily. The hotels and the Conventions Bureau are aiding the committee in a most satisfactory and helpful way to see that the fellows are comfortably housed and accommodated. The A. M. A. meetings tax all cities entertaining them to the limit of hotel capacity. Whenever possible a good fellow should double up so that no one is left without comfortable lodging.

Reservations should be made by communicating direct with the hotels. If satisfactory arrangements can not be made in this way, write to Dr. Louis H. Behrens, Chairman Committee on Hotels, 3525 Pine Street, St. Louis, Mo.

INCOME TAX FACTS.

In making out his income tax return for 1921, the average taxpayer will find a considerable saving in comparison with the amount of tax paid on the same income for 1920.

The exemptions provided by the revenue act of 1921 are $1,000 for single persons (the term including widows, widowers, divorcees, and persons separated from husband and wife by mutual agreement), $2,500 for married persons whose net income was $5,000 or less, and $2,000 for married persons whose net income was $5,000 or more. Under the revenue act of 1918 the personal exemption allowed a married person was $2,000, regardless of the amount of net income. The personal exemption allowed a married person applies also to the head of a family, man or woman who supports in one household one or more relatives by blood, marriage, or adoption.

The exemptions for dependents—a person who receives his chief support from the taxpayer and who is under eighteen years of age or incapable of self-support because mentally or physically defective—is increased from $200 to $400.

The act requires that a return be filed by every single person whose net income for 1921 was $1,000 or more, every married person whose net income was $2,000 or more, and by every person—single or married—whose gross income was $5,000 or more.

The requirement to file a return of gross income of $5,000 or more regardless of net income is a new provision. Net income is gross income less certain specified deductions for business expenses, losses, bad debts, etc., which are fully explained on the forms.

Returns must be filed by married couples whose combined net income for 1921, including that of dependent minor children, equaled or exceeded $2,000, or if the combined gross income equaled or exceeded $5,000.

The period for filing returns is from January 1 to March 15, 1922. Heavy penalties are provided for failure or "wilful refusal" to file a return on time.

Forms 1040A for incomes of $5,000 and less and 1040 for incomes in excess of $5,000 may be obtained from the offices of collectors of internal revenue and branch offices. The tax may be paid in full at the time of filing the return, or in four equal installments, due on or before March 15, June 15, September 15, and December 15.

Obituary.

DR. D. F. WILSON—David F. Wilson, M. D., Hampton, aged 60, died January 28, 1922. He was a graduate of University of Arkansas Medical School, a native Arkansan and practised medicine in Calhoun County for more than thirty years. He is survived by his wife, one daughter, Miss Sallie Lou Wilson, four brothers, Alex, John and Gus, of Calhoun County and Dr. George L. Wilson, of Hermitage; and one sister, Mrs. M. J. Rowland, of Avant, Okla.

DR. W. A. SMITH—William A. Smith, M. D., Walnut Ridge, died January 30, 1922. Aged 60. He graduated from the Kentucky Medical College and practised medicine in Walnut Ridge for thirty years. He is survived by a brother, Dr. R. N. Smith of Augusta; two sons, R. W. and R. L. of Walnut Ridge, and a daughter, Mrs. E. R. Ash, of San Antonio, Texas.

County Societies.

CRAWFORD COUNTY.

(Reported by S. D. Kirkland, Sec.)

The Crawford County Medical Society met in Van Buren, January 26, 1922.

Officers elected were: President, O. M. Bourland, Van Buren; Vice-President, S. C. Grant, Mulberry; Secretary, S. D. Kirkland, Van Buren; Treasurer, M. S. Dibrell, Van Buren; Delegate to the State Society, S. D. Kirkland; Alternate, J. A. Wigley.

SEARCY COUNTY.

(Reported by Sam Daniel, Sec.)

The Searcy County Medical Society met in regular annual session in Marshall, January 19, 1922.

After the transaction of several things pertaining to the general welfare of the physicians in the county, the following officers were elected for the ensuing year: President, A. S. Baker, Snow Ball; Vice-President, J. A. Henley, Marshall; Secretary-Treasurer, S. G. Daniel, Marshall; State Delegate, G. W. Dickens, Leslie.

Fifteen members paid their dues for 1922.

PULASKI COUNTY.

REPORT OF COMMITTEE ON DR. CALDWELL'S ADDRESS.

(Drs. Rhinehart, Gann and Dooley)

COMMITTEE REPORT.

Your committee, appointed to make recommendations in an attempt to remedy some of the deficiencies in the practice of the Pulaski County Medical Society and its members, as indicated in the message of retiring President Caldwell, that was read on December 19, wishes to make the following report:

One of the chief objects of any medical organization should be the encouragement of medical research. This can best be done by fostering a scientific spirit among its members. Such a spirit, once started, is highly contagious and will spread in an ever increasing volume. It is to this spirit, begun at Johns Hopkins by Osler, and at the Mayo Clinic by the elder Mayo, that these medical institutions now owe their size and prestige.

By each of us undertaking some problem for investigation, by each of us helping the other in his work, by the reference of cases to that man who is especially interested in a particular group of cases, by the frequent discussion of problems confronted in such an investigation, such a spirit can be born and fostered. A research may be a matter of a single case, it may be a question of months or years and may take a lifetime. Whatever experience any man may have in this line of work will certainly be freely given to any other man undertaking such work.

In this connection your committee wishes to make two recommendations. First, that a special committee on research be appointed whose function it shall be to keep before the members of the society this phase of its work. Second, that a gold medal be awarded that member of the society, who, by a vote of the membership, publishes the best paper on an original subject in a recognized medical journal during the year.

The committee realizes that many valuable papers are not based on original work but on a careful review of the literature with the

personal observations of the writer, or on the experiences of the observer in a particular field for a period of time. Recognizing this, and to encourage a more careful preparation of papers for presentation to the society, it is recommended that a second gold medal be offered for the best paper presented before the society by one of its members as a part of the regular program each year.

The committee further recommends that a place be provided on the society programs for reviews of the literature on recent advances in medical science, the subjects of these reviews and their frequency to be left to the members of the program committee. The committee believes that these reviews should be brief, and composed of only points of general interest rather than special application; otherwise they are apt to be tiresome and uninteresting to the majority.

The committee believes that the society should take a more active interest in the civic happenings of the community, inasmuch as only those organizations that are publicly known to take an interest in public affairs have presented to them for their endorsement information and data relative to civic reforms, etc. It is recommended that more publicity be given the actions of the society and that a certain individual member be appointed to see that this object is carried out.

The committee is convinced that the larger purposes of the society as outlined can not be realized unless there is a larger attendance at the meetings. The most frequent excuse for nonattendance is the statement that the same old crowd is running things in the same old stereotyped way. We plead guilty to being a part of the same old crowd; but we would gladly have our crowd eliminated, not by exclusion, but by amalgamation and absorption into a much larger new crowd. We feel that a larger attendance, with greater interest will produce better papers, more pertinent discussion and make the society meetings of greater value to all those attending and taking part. Therefore, to stimulate a larger attendance and to inculcate a "medical society habit" upon those who do not now have it, we recommend that a large and active attendance committee be appointed whose sole duty it shall be, by personal solicitation, to increase the attendance at meetings.

Your committee feels considerable hesitancy in approaching such a delicate subject as the personal relationship between doctors and the courtesy that should be shown one by another. The committee, however, condemns with all possible vigor, any statement made about any other physician that is detrimental to his reputation for personal or professional honesty, ability and integrity. The offense is just as great if it is but the confidentially expressed opinion of one physician to another as it is if committed before a layman. We would recommend that each one appoint himself a committee of one to vigorously exclude from his thoughts, all such practices.

If such of us could have displayed in a conspicuous place so that it could be frequently seen, the following quotations from Osler and Benjamin Franklin, the functions of these many committees of one might be better carried out. Osler says, "Never let your tongue say a slighting word of a colleague. It is not for you to judge. Let not your ear hear the sound of your voice raised in unkind criticism or ridicule or condemnation of a physician." The second and seventh of the thirteen precepts of Franklin to the observation of which he attributes whatever claim he may have to being the greatest American of all times are as follows: "Speak not but what may benefit others or yourself; avoid trifling conversation." "Use no hurtful deceit; think innocently and justly, and, if you speak, speak accordingly." The committee realizes that these larger objects of the society can not be fulfilled by a vote instructing the secretary to do thus and so. The society has grown too large for one man to look after it all. He should have several assistants, each the chairman of some special or permanent committee, and each to look after some temporary or permanent object in the welfare of the society. We realize that larger activities will require larger expense and we recommend that the society spend its surplus funds in such an increase of its activities. The committee believes that if these objects are carried out by co-operation and activity of a united membership of the society there will be a renaissance in medical thought, in medical practice, in medical interests, and, incidentally, in the medical welfare of this community.

Book Reviews.

Optimistic Medicine, or the Early Treatment of Simple Problems Rather Than the Late Treatment of Serious Problems.—By Arthur G. Crandall, a former insurance man. Published by F. A. Davis Company, Philadelphia, Penn. Price, $3.00.

One of the outstanding features of this book is the importanee of maintaining an optimistie attitude at all times, if one would preserve a sound mind in a sound body. Examples show how the well may stay well, and the diseouraged may "eome baek" by the tonie known as OPTIMISM.

Practical Chemical Analysis of Blood.—A book designed as a brief survey of this subject for physicians and laboratory workers. By Victor Caryl Myers, M. A., Ph.D., Professor of Pathological Chemistry in the New York Post-Graduate Medical School and Hospital. Illustrated. Published by C. V. Mosby Company, St. Louis. Price, $3.00.

This book will serve a useful function in indieating why, and how certain ehemieal blood analyses should be made.

It will appeal partieularly to those interested in sueh constitutional conditions as nephritis, diabetes and gout.

Pediatrics.—Edited by Isaac A. Abt, M. D., Chicago, with the collaboration of Johanna Heumann, M. D.

Orthopedic Surgery.—Edited by Edwin W. Ryerson, M. D., Chicago, with the collaboration of Robert O. Ritter, M. D. Volume IV. The Practical Medicine Series. Published by the Year Book Publishers, 304 South Dearborn St., Chicago. Price, $1.75.

The opening ehapter in this volume refers to the progress in pediatries, followed by articles on diseases of the new-born, infant feeding, gastro-intestinal diseases and other ailments eommon in childhood. The remaining one hundred pages are devoted to a review of the reeent literature pertaining to Orthopedic surgery.

Dietetics.—With reference to diet in health and disease. By Alida Frances Pattee. Thirteenth edition. Revised. Published by A. F. Pattee, Mount Vernon, New York. Price, $2.25.

One of the interesting features of this book to us is that part whieh refers to "A Well Balaneed Diet." A table has been introdueed showing the food value of a large number of eommon foods, whieh will be useful in eomputing other food eombinations, and in ealeulating the amount of protein, fat or earbohydrates in any dietary, whenever required, without tedious mathematieal proeesses usually involved in such operations.

With eaeh eopy sold a supplement is given eomplimentary State Board Requirements and Examination Questions in Dieteties.

Keen's Surgery.—Volume VII. By Surgical Experts. Edited by W. W. Keen, M. D., LL.D., Hon. F. R. C. S., England and Edinburgh, Emeritus Professor of the Principles of Surgery and Clinical Surgery, Jefferson Medical College, Philadelphia. Octavo of 855 pages, with 359 illustrations, seventeen of them in colors. Published by W. B. Saunders Company, Philadelphia, 1921.

An interesting feature in this well known and well edited volume reeords the aehievements of surgery during the war period of 1914 to 1919. Quoting the author as to his seeond purpose in presenting this new edition "it makes available for the surgery of peaee the lessons taught us during the war."

A large number of distinguished eontributors help to eomplete this splendid work on surgery.

Diagnostic and Therapeutic Technic.—A manual of practical procedures employed in diagnosis and treatment. By Albert S. Morrow, M. D., late Lieut.-Colonel, M. C., U. S. A., attending surgeon to the City Hospital and to St. Bartholomew's Hospital, New York City; consulting surgeon to the Nassau Hospital, Mineola, L. I. Third edition, entirely reset, octavo of 894 pages, with 892 illustrations, mostly original. Published by W. B. Saunders Company, Philadelphia, 1921.

In this volume Dr. Morrow has endeavored to bring together and arrange in a manner easily aeeessible for referenee a large number of proeedures employed in diagnosis and treatment. Some methods belong essentially to the speeialist, but the majority are the every-day praetieal proeedures whieh the general praetitioner may at any time be ealled upon to perform.

In this new edition we find many of the newer methods of diagnosis and treatment and additional illustrations.

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Original Articles.

THE IMPORTANCE OF SPINAL FLUID EXAMINATION IN EARLY SYPHILIS.*

E. H. Martin, M. D., and E. A. Purdum, M. D., Hot Springs.

As early as 1903 foreign workers began reporting observations on the involvement of the nervous system in early syphilis and occasional articles appeared during the next ten years, but it was not until 1914 and 1915, when Wile & Stokes, of the University of Michigan, published the results of spinal fluid examinations, with particular reference to secondary cases, that a real impetus was given to the work in this country. The literature appearing since that time has contained innumerable reports, many of them being brief, but quite conclusive.

In 1918, Klauder[1] concluded, from a review of several contributions and his own work, that it was apparent from laboratory and clinical evidence that the nervous system was involved in a large group of cases in the early period of syphilis. In addition to this group there is another without neurologic or spinal fluid abnormalities other than the presence of treponema in the fluid. These observations together with clinical and laboratory knowledge concerning the invasive power of treponema during the period of early spread from the primary lesion, support the belief that at this time, probably in all cases of syphilis, the nervous system is invaded by the parasites. The nervous system at the time of the invasion may or may not react to the organism. Hence the discovery of the infectious power of the spinal fluid without biologic change.

The percentage of abnormal spinal fluid in early syphilis varies with different writers as they have various standards for normal, particularly as regards the cell count. Some use a standard as low as 5 per cm., while others consider anything below 8 and some cases below 10, as nonpathological. We regard any count above 6 as suspicious and needing further observation and more so if there be a slight increase in globulin; as this has been in some cases the only evidence of beginning pathological change.

A recent article by Wile & Marshall,[2] reviewing the spinal fluid findings in nearly two thousand cases, shows that we must make tests early in the course of syphilitic infection in order to determine the seriousness of a given case. It is only in this way that adequate treatment can be planned and carried out. In their work they found positive evidence of abnormal change in the cerebrospinal fluid as follows:

Increased cell count in primary cases 16 per cent, secondary 34 per cent; increased organic solids in primary cases 19 per cent, secondary 35 per cent; positive Wassermann reaction in primary cases 5.9 per cent, secondary 26.5 per cent.

In conclusion these authors state that if the nervous system is found uninvolved during the first months of infection there is seldom an invasion later. Also that comparing the large number of cases of primary and secondary syphilis in which positive findings are obtained with the relative same percentage of neuro-syphilis as compared to total syphilitic incidence, we must conclude that a large number of early cases are in the nature of a meningeal roseola, which is transitory in its

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

(1) Klauder, Jos. Victor, M. D., Philadelphia, Pa. The Am. J. Syphilis, 1919, Vol. 3, No. 4, p. 559.

(2) Wile, Udo J., and Marshall, C. H. Arch. of Dermat. & Syph., 1921, Vol. 3, No. 3, p. 272.

clinical aspects. It is only by knowing the condition of the spinal fluid early that we can direct treatment and later by further examination estimate the ultimate prognosis of the disease with regard to the effect on the nervous system.

One of the latest communications by Fordyce[3] states that he is convinced that practically all types of neuro-syphilis originate within the first year of infection and are then amenable to proper treatment; also that the percentage of old neuro-syphilis corresponds roughly to the percentage of invasion found during the first year.

Our own work, dating since 1915 and more particularly since 1918, only serves further to emphasize the necessity of finding where the patient stands when treatment is first applied for. During the last six years we have made a total of 1,262 spinal fluid examinations on 400 patients. In this series twenty-four examinations were made in the secondary period of the infection and 20 per cent were found to be definitely pathologic. In two cases of primary syphilis examined negative results were obtained.

It is quite evident from the figures quoted from other observers and from our own observations that we can expect at least 20 per cent of our early cases of syphilis to show evidence of change in the cerebro-spinal fluid, and if we know, during the early part of their treatment, the exact status of this involvement, we can later give a much better prognosis by noting the change or response to treatment that has occurred. If, after intensive intravenous therapy, the response or change in the spinal fluid is very slow, then it is necessary to plan long continued treatment. If, on the other hand, the response to treatment is quick and the fluid becomes negative rapidly, it is only necessary to have the negative findings confirmed upon later examination and it has been our experience that once the spinal fluid becomes definitely negative in the early course of treatment there is no return to positive.

There are certain points regarding the technique of spinal puncture as made in our clinic that we wish to emphasize. First, that it is entirely feasible to make the puncture in one's office. Following this, the patient should be sent home in a car or wheel chair to avoid jarring or agitation of the nervous system while the intraspinal pressure is below normal. We then request that the patient lie prone for two hours and remain recumbent for forty-eight hours. By doing this the principal disagreeable reaction, headache, that sometimes follows a spinal puncture, can be practically avoided. The percentage of headaches occurring under this routine is very small. Experimental evidence has shown that this headache is not due in most cases to the amount of fluid withdrawn, as usually supposed, but to the fact that the spinal canal has been entered with a needle at all; as we know that this symptom can occur if a puncture is made and no fluid withdrawn.

Probably forty hours in bed would give as low a percentage of headache as the forty-eight hours; but we feel that the extra time gives no additional inconvenience, is easier to remember on the part of the patient and very likely makes the patient more comfortable.

In this series of over 1,200 spinal punctures we have found absolutely no contraindication to the procedure and have had no lasting discomfort. In most cases where a headache does occur when the patient is out of bed at the end of forty-eight hours, it will subside by having the patient remain in bed an additional two days. In a few instances there has been slight vertigo or persistence of a "light" feeling for one month; but even this is justified when we consider the importance of knowing where the patient really stands regarding the necessity for a better prognosis or treatment.

There exists yet an unusual fear on the part of most patients, whether they be from the lay ranks or unfortunate members of our profession, regarding the pain caused at the time the spinal puncture is made. We can emphatically state that by inserting the needle in the mid-line with the patient in proper position, sitting on a chair of moderate height, the pain is very little more than caused by the average venous puncture. If the spinal needle is directed properly there is no pain from encountering the larger nerve terminals or coming into contact with the vertebrae. If workers along this line will only learn that when the spinal needle meets resistance, there

(3) Fordyce, John A. Am. Jour. Med. Sci., 1921, Vol. CLXI, No. 3, p. 313.

is nothing to be gained by additional pressure; but that the needle should be slowly withdrawn until the point is again near the skin and then properly redirected. There is no necessity for again puncturing the skin or for producing extreme pain by striking the structures referred to above.

There is much room for help on the part of those who treat syphilis in any way by their impressing upon the patient the necessity for a spinal examination at the proper time and that this examination is not attended by any danger and should not be more painful than any other hypodermic injection.

When arsphenamine was first introduced it was always necessary to practically overpersuade the patients in order to overcome their fears of taking the drug. In a similar way the same thing has to be gone through with whenever a spinal puncture is suggested; but we are glad to say that such fear is slowly being removed and with better co-operation on the part of those who usually first see cases of syphilis, the syphilographer will be able to make any tests necessary without having so many explanations to make. It is all right for the first physician who sees the patient after he has contracted syphilis to give him specific treatment as soon and as completely as possible, as in this way we more quickly have a reduction in the chances for nervous system invasion and also render the patient non-infectious; but these cases must not be turned loose as cured until the blood Wassermann has remained negative over a long period of time and the spinal fluid found to be negative also.

Most workers at the present time do not examine the spinal fluid in early cases of syphilis until they have given five or six intravenous doses of arsphenamine. If the examination is then entirely negative it is not likely to become positive later. We believe, however, from experience gained during the last few years, that it is better to examine the spinal fluid after the second dose of arsphenamine as, in a few instances, there is found to be such marked invasion of the nervous system that treatment should be inaugurated at once and in this way the infection more quickly controlled. If such cases are not observed until after the sixth intravenous treatment and they have been definitely positive, probably upon the beginning of treatment, valuable time has been lost not only in reducing the positive findings, but also in rendering an early elimination of the disease from the cerebro-spinal system possible.

The following case reports will better emphasize the principal points discussed:

Case 1. K. Young adult, male, age 21. First noticed secondary eruption in early part of December, 1920. One month later blood Wassermann 4 plus. Received four intravenous doses of arsphenamine and following the fourth treatment an examination of his spinal fluid was made with the following results: Negative on O. 2 cc., and O. 5 cc., and 2 plus on 1 cc., with globulin positive and a cell count of 10. Response to the first three doses of arsphenamine in this case was rapid. All reflexes were normal and this patient gave not the slightest clinical indication of any abnormality of the spinal fluid. Treatment was continued as long as patient could remain here and he was then directed to a competent man nearer home and we believe that he will eventually be cured as he realizes the necessity for continued treatment and observation.

Case 2. A. J. Was examined in August, 1919. Blood Wassermann was 4 plus. Patient gave history of primary lesion ten months previous. Secondaries were negative or unnoticed. He responded well to arsphenamine and after the fifth dose an examination of spinal fluid was made with following findings: Plus 0.2, 2 plus 0.5, 3 plus 1.0 cc.; globulin positive and cell count 24 per cm. In this case there was a slight amnesia to call attention to a probable change in the nervous system; but response was so quick to intravenous treatment alone that only a routine examination of the spinal fluid would have given evidence of the real difficulties to be surmounted in treating this case.

Case 3. Was that of a young negro man, aged 24, who, upon examination in the early part of January, 1921, showed blood Wassermann 4 plus, with history of primary in August, 1920, and secondaries one month later. Very few symptoms existed when treatment was begun and all reflexes were normal when examined. After his second intravenous dose a spinal puncture was made with the following results: Negative on 0.2 cc., negative on

0.5 cc.; but 3 plus on 1 ce., with positive globulin and cell count of 12.

Additional eases might be reported, but the above are typical and forceful enough to render further repetition unnecessary.

Formerly, we only made an examination of a patient's spinal fluid when there was some real evidence of neurologie ehange, or to exclude lues as a cause of disease; but we could not be more negligent than to wait for absolute evidence at the present time. With no real contra-indication to making a spinal test at any time desired, we must educate the public so that this work ean be done in every case of syphilis without fear of harm and with everlasting benefit to the doetor and patient. Only in this way will we reduce the enormous damage being done by syphilis in every community and give those who place their eonfidence in us the chanee to be returned to soeiety with all stigma removed.

A RESEARCH STUDY OF MUMPS.*

Solomon F. Hoge, M. D., Little Rock.

The data for this paper is drawn primarily from a study of a number of eases of mumps during the epidemic at Camp Pike, 1919. The subsequent cases have been added from time to time as they were available. The elinical aspect of the ease can be passed over with only a refercnce since the patient was not taken up on this series until the elinieal diagnosis had been made by the attending surgeon. The control eases were taken from the orthopedic ward and were as far from anything that pertained to mumps as it was possible to secure.

In a careful study of the usual case of mumps one is frequently impressed with the evidence that the condition is one due, either directly or indirectly, to some type of infeetion which may be bacterial or protozoal in nature. Under the impression that the condition might be due to some form of bacterial infection the following course of study was pursued:

First Group.

For the bacterial study the eases were divided into groups of fifty men each. The men were visited shortly after they had arrived on the ward and the diagnosis had been made by the medical officer. There was a record made of the number of hours that had elapsed from the time the patient first noticed the pain in his jaw till he arrived in the hospital. The accuracy of the statement, of eourse, depended upon the patient's memory. A few clinical notes that might have some bearing on the case were jotted down for future reference. A tongue depressor was then introduced into the patient's mouth and the opening of Steno's duct exposed. The papilla was almost always reddened and swollen and the opening rather difficult to see. A sterile dry cotton applieator was then gently rubbed over the tip of the papilla, being eareful not to touch the mueous membrane of the mouth, removed and stroked over sterile dextrose horse blood agar plates that had been kept warm. The applicator was then washed off in serum dextrose broth tubes. The cultures were then returned to the warm eontainer and taken to the laboratory and placed in the ineubator. Specimens were always secured from both the papillae. On returning to the laboratory anerobic cultures were made after the method of Dicks[1]. The cultures were ineubated at 37 e. until a good growth appeared. This usually required over night. The plates were retained for 72 to 96 hours, in order not to overlook any of the more tardy growing organisms. The plate usually showed a luxuriant growth of a variety of organisms. Sometimes, however, it was limited to one single strain. The one most constant organism and at times the only organisms present proved to be the viridans type of the streptococcus. The other organisms frequently encountered were the micrococcus catarrhalis and the staphyloeoccus. Those occasionally found were the pneumoeoccus, type IV. (twice), bacillus influenza (three times) and the gamma strain of the streptococcus hemolyticus. Saprophytes were not infrequently encountered.

Second Group.

The technic in this group was the same as in the first group, except that the papilla of Steno's duct was sponged dry of the secretions of the mouth with sterile cotton and the eulture taken from the secretion that could be expressed by massage. The plating

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

and the culture were the same as the previous group. Examination of the cultures showed that the cleansing of the papilla had eliminated a good part of the saprophytic organisms and had at the same time cut down the number of the other organisms. A summary of the findings of this group gave about the same results as those of the previous group.

Third Group.

In this group of cases the papilla of Steno's duct was sponged off with a weak solution of iodine. After the iodine had dried, a curved platinum wire was inserted directly into the duct as far as 1 1-2 to 2 cm. This was then withdrawn and stroked over the blood agar plates and washed in the dextrose broth tubes. In most of the cases the iodine solution did not hide the opening of the duct; but, on the contrary, caused a little dimpling of the stomata, which made the finding of it easier. The results were in striking contrast to those of the previous groups. Instead of finding the luxuriant growth of the previous cultures, the plates and the broth failed to show more than the merest kind of growth. Many of the attempts failed to produce any results whatever. When growth did occur it was entirely similar to that found in the previous cases. The observation on these fifty cases would warrant the impression that when the sterilization of the tip of the duct was complete and the probe introduced directly into the duct without touching the adjacent mucous membrane that the culture would be negative.

Fourth Group (Control Cases).

In this group the combination of the three previous methods was tried. This meant a culture from the tip of the duct after it had been sponged dry with sterile cotton, a culture of the secretion following cleansing and massage of the gland and duct, and a culture from within the duct proper. In summing up the findings of this group there was no evidence of any distinct difference to that of the mumps cases.

Fifth Group.

In this group the tip of the duct was sterilized with the weak iodine solution. The platinum wire introduced and the secretion taken up in salt solution and examined under the dark-field for the presence or absence of fully developed spirochetes. A summary of the findings of this group did not demonstrate the presence of fully developed spirochetes.

In the analysis of the above results there is wanting any very convincing evidence that the disease of mumps is due to a bacterial infection, and surely not due to the organisms that grow readily on the ordinary culture media. A diligent search was made to find a short gram negative rod not unlike the influenza bacillus; but the effort was not rewarded.

Not being convinced from the above findings that this was a bacterial disease, it was decided to study it from the standpoint of protozoal infection. The "Filterable Virus"[2] study was not possible because of lack of proper laboratory equipment. The laboratory was equipped, however, with a very high speed centrifuge and the method of separation was followed out in the manner to be described.

Technic.

The patient was given a glass of water and told to rinse the saliva out of the mouth. After rinsing the mouth the collection of the specimen was started. A sterile sputum bottle was placed along the side of the bed and the patient told to expectorate the saliva from the mouth into this bottle at intervals until the proper amount was secured. He was not allowed to eat or chew anything during the collecting period other than some chewing gum to encourage the flow of saliva. The amount collected in an hour, in most instances, was between 40 and 60 cc. When properly secured the saliva showed in two distinct layers. The surface was covered with a thick, white frothy layer, often containing little white flecks of residual food. The bottom was of a milky gray color and contained no white flakes. The specimen was taken to the laboratory and the bottom portion pipetted off into a centrifuge tube. This was put into the centrifuge and spun at high speed for half an hour. This treatment in all but a few cases gave a tube with all the solid material in the bottom and the supernatant a perfectly clear fluid. Those cases that did not come out clear after the first treatment were diluted with a few cc.'s of salt solution and the centrifuging repeated. As soon as the

centrifuging was completed a plating was made to the various media, that it might be ascertained how nearly sterile the fluid was that was to be injected and at the same time get a line on the type of organisms that were not thrown down in the process of centrifuging. It was soon learned that the fluid in most instances was practically sterile. Those cases that did show growth showed the viridans type of the streptococcus. There was no attempt made to follow out other methods of sterilization. Two cc.'s of this clear fluid was used as the injecta. The site of the injection varied to include the vein, the parotid, the belly, the testicle or any combination of the above sites.

Study of the Patient's Blood.

Wishing to learn whether the blood stream was circulating demonstrable evidence of this disease to the various parts of the body, the following investigation was carried out. Ten cc.'s of blood was drawn from the median basilic vein under the same technic as that used in the taking of ordinary blood cultures. A portion of this blood was cultured in the same manner as that used in the culture of bloods for the pneumococcus and the streptococcus. The other portion was defibrinated or allowed to coagulate. This procedure depended upon whether whole blood or serum alone was to be used. The amount of the injecta in either case was two cc. The time chosen for the collection of the specimen was at or about the time the temperature curve reached its apex of the mumps attack. The same was true during the orchitis complication. In one case the time between the attack of mumps and the apex of the orchitis temperature curve was seventeen days. (Case No. 1.)

The term positive as it appears in this series is used to include those cases that showed a more or less definite alteration in the temperature and leucocytic curves following the injection of the centrifuged specimen of sputa or of whole blood or of serum. This alteration in the different animals came on, reached its apex and declined at closely related periods of time. The term negative is used to include all those cases where the animal did not show the change in the temperature curve nor the increase of the leucocytes. The pneumonia column shows three of the cases died before it was time to conclude anything definite relative to the mumps reaction.

In analyzing the accompanying tables there were out of the 20 animals used, 10 that showed positive readings, 6 that showed negative reactions, 3 died of pneumonia and 1 that was chloroformed at the end of the fourth day. The specimens for injection were collected at intervals that covered a period of from 24 hours to 17 days after the appearance of the mumps. The cases showing positive reactions following the injection of the centrifuged sputa all came in a period prior to 96 hours after the appearance of the mumps. The cases showing positive blood findings came at a period when the temperature curve of the mumps was at or near its apex or while the orchitis was at its height. None of the specimens of sputa secured after the fifth day of the mumps showed a positive reading. In so far as the point of election for injection is concerned there seems to be very little difference.

The animals used were healthy male guinea pigs and about half grown. The control and the experimental animals were kept under as nearly similar conditions as it was possible to secure. The temperature in some of the cases was taken every day, while in others it was taken on alternate days. The temperature was taken per rectum and the ordinary thermometer was used. The white and the differential counts were taken on alternate days. The technique used was the same as that used in making the white and differential count in the human blood. The stain used was made after the formula for Wright's as it is given in the Laboratory Manual No. 6 of the War Department, page 29.

It will be noticed from the chart that animals 27 and 28 were injected with whole blood and blood serum taken from the patient 24 hours after the appearance of the mumps and are in the negative column. The age of the specimen is, however, listed as ten days. A shortage of animals necessitated the delay. At the end of the period the blood was taken up and again cultured to determine the sterility, and injected. Each procedure that was carried out was checked up with the control animals. These animals are not listed. One case is entitled to special reference. This animal had injected into his testicle one-half

billion of the gamma strain of the streptococcus hemolyticus isolated in pure culture from one of the specimens of sputa that was being used. An abscess developed at the site of the injection. The animal died in about five days with a streptococcic septicemia. Blood cultures on the animal both before and after death showed numerous colonies of the same type of organisms that had been used in the injection. The sputa was taken from persons not having the mumps and treated in a manner similar to that used in the mumps cases, and injected into animals, gave no findings worthy of note.

Pathology.

Although all the animals were posted the pathology will be conspicuous by its brevity. Those animals that did not die during the experiment were kept for two weeks after the temperature had reached its normal and the leucocytic count showed no curve. They were

PATIENTS NO. #.	DISEASE.	SITE OF DISEASE.	AGE OF DISEASE.	ORCHITIS.	TIME OF ORCHITIS.	PIG NO. #.	SPECIMEN.	QUANTITY.	SITE OF INJECTION.	AGE OF SPECIMEN.	POSITIVE.	NEGATIVE.	PNEUMONIA.	CHLOROFORMED.
I.	M.	B.	I7DAYS	#.	I7D	I.	C.S.	AA I.C.C.	VEIN R.T.	5 HRS.	-	#.		
	"	"	"	"	"	5.	BLOOD	2 C.C.	R.T.	6 "	#.			
2.	"	Rt.	24HRS.			I2.	C.S.	AA I.C.C	VEIN R.T.	4 "	#.			
3.	"	"	48HRS.			20.	C.S.	2.C.C.	BELLY	4 "	#.			
4.	"	B.	56HRS.			4.	C.S.	2.C.C	VEIN.	4 "	#.			
"	"	"	"			6.	BLOOD	2.C.C	BELLY	5 "	#.			
5.	"	Rt.	90HRS.			I3.	C.S.	2.C.C	VEIN.	IO "	#.			
6.	"	B.	56HRS.			2.	C.S.	AA I.C.C	R.T. R.P.	5 "	#.			
7.	"	Rt.	24HRS.			I6.	C.S.	AA I.C.C	R.T. BELLY	5 "	#.			
"	"	"	"			27.	WHOLE BLOOD	2.C.C	BELLY	IODAYS		#.		
"	"	"	"			28.	SERUM	2.C.C	BELLY	IODAYS		#.		
8.	"	B.	48HRS.			I7.	C.S.	AA I.C.C	R.T. BELLY	5 HRS.	#.			
"	"	B.	"			29.	SERUM	2.C.C	BELLY	5 "			#.	
"	"	"	6DAYS			22.	C.S.	AA I.C.C	VEIN BELLY	5 "		#.		
"	"	"	"	#.	6D.	30.	WHOLE BLOOD	2.C.C.	BELLY	5 "	#.			
9.	"	Rt.	IODAYS			3.	C.S.	I.C.C	BELLY	IO "		#.		
IO.	"	B.	9DAYS			I5.	C.S.	AA I.C.C	R.T. BELLY	5 "		#.		
II.	"	Lt.	48HRS.			8	C.S.	AA I.C.C.	R.T. BELLY	5 "				#.
I2.	"	B.	24 "			I8.	C.S.	2.C.C	BELLY	5 "			#.	
I2.	"	"	72 "			2I.	C.S.	2.C.C	BELLY	5 "			#.	
			TOTALS			20					IIO.	6.	3.	I.

KEY:--- "M"--MUMPS: "B"---BOTH SIDES: "Rt"---RIGHT SIDE: "Lt"---LEFT SIDE: "C.S."---CENTRIFUGED SPUTA: "R.T."---RIGHT TESTICLE: "R.P." RIGHT PAROTID GLAND.

then turned over for use in the Wassermann work. They were all posted after they had been killed for this work.

Macroscopic pathology is wanting in all the cases except two. In these two cases the testicle receiving the injection was much smaller than its fellow. The site of the injection could not be demonstrated. There were no adhesions and no discoloration of the testicle. The parotids were negative for gross pathology. The abdominal injections did not leave a trace to mark their site. The microscopic study will warrant the dismissal as negative, all the cases except the two atrophic testicles. In comparing the atrophic testicle with the testicle of the opposite side, we find a decrease in the spermatogenic cells and the more completely developed spermatozoa. The cells retained the stain poorly. The limiting membrane of the cell was indistinct and frayed out. There was an apparent increase in the fibrous tissue of the atrophic organ. By way of incidentals it might be remarked that the complement titration was just as high in the animals that were used in the experiment as those not so treated.

A study of the two charts, one of animal No. 20 and the other of animal No. 22, will give a very good comparison of a positive and a negative curve. They were both injected with equal amounts of centrifuged sputa. No. 20 was injected into belly, while No. 22 was injected into both the vein and the belly. In No. 20, only 48 hours had elapsed from the beginning of the disease till the specimen was secured. In No. 22, the interval was six days. In all other conditions the cases are as nearly alike as could be had. In the comparison of the differential counts of these two animals and that of others there was a suggestion of an increase of the lymphocytes rather than of the polymorphonuclears. This, however, could not be satisfactorily substantiated.

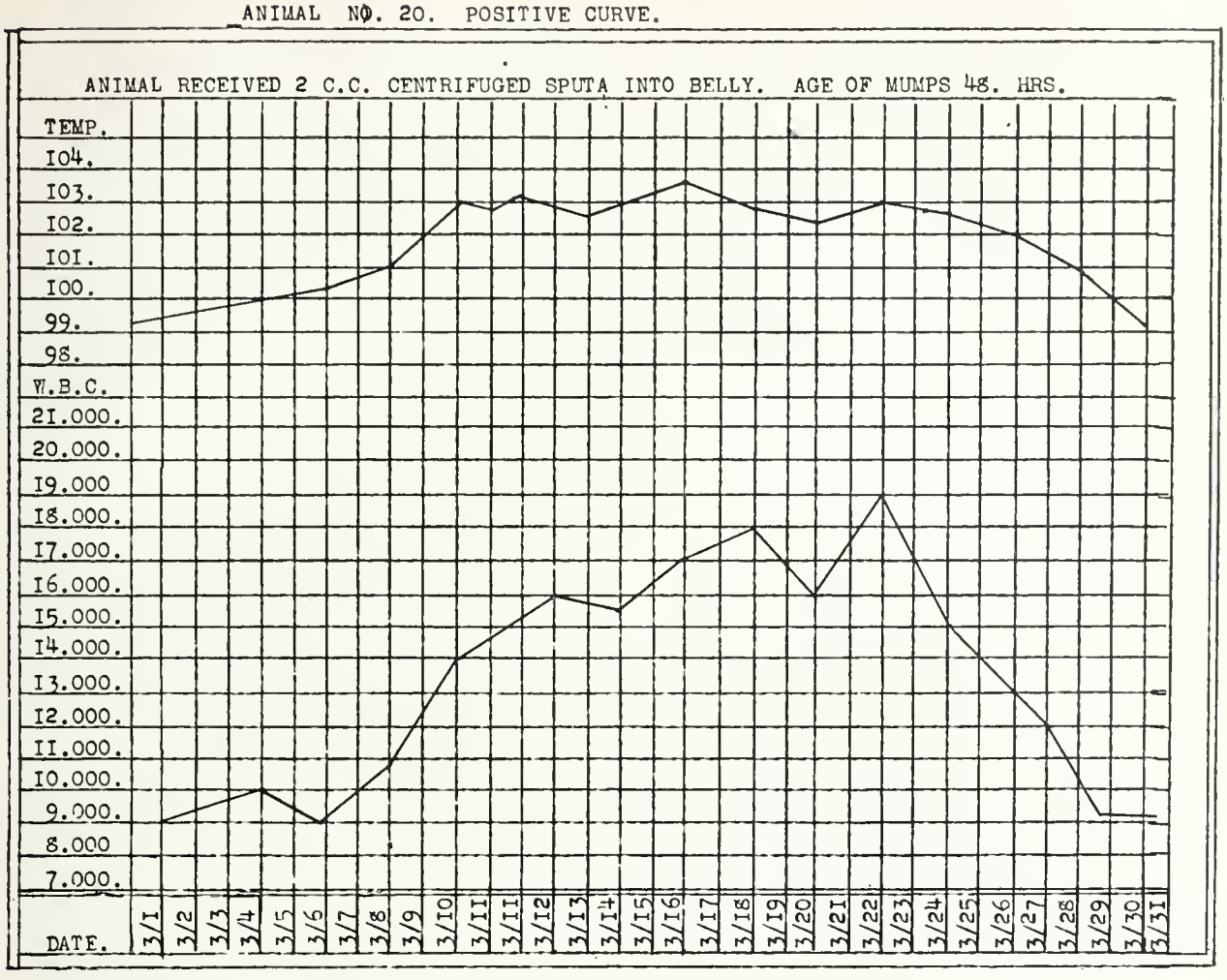
Summary.

From the study of the various cases one can not but notice the many points of striking similarity in those recorded as positive. The period from the time of the injection till the first appearance of a definite increase of leucocytes, and an elevation of the temperature, was very constant. This held true of the animals receiving the centrifuged sputa as well as those receiving injections of blood or serum. The increase started between the sixth and the eighth day in all the cases. The stadium of the curve was quite constant. The base line of normal for all the animals was reached by the twenty-ninth day. This gave an "incubation period," so to speak, of about seven days, a curve of from seventeen to twenty days, a period of the disease lasting from twenty-four to twenty-seven days in so far as we are able to judge by the alteration of the temperature and the leucocytic curve. The animals used as controls and those injected with the centrifuged sputa collected later than five days after the beginning of the parotid swelling, did not show the alterations that the mumps animals did. The blood drawn and injected as previously described gave results entirely comparable to that of the sputa.

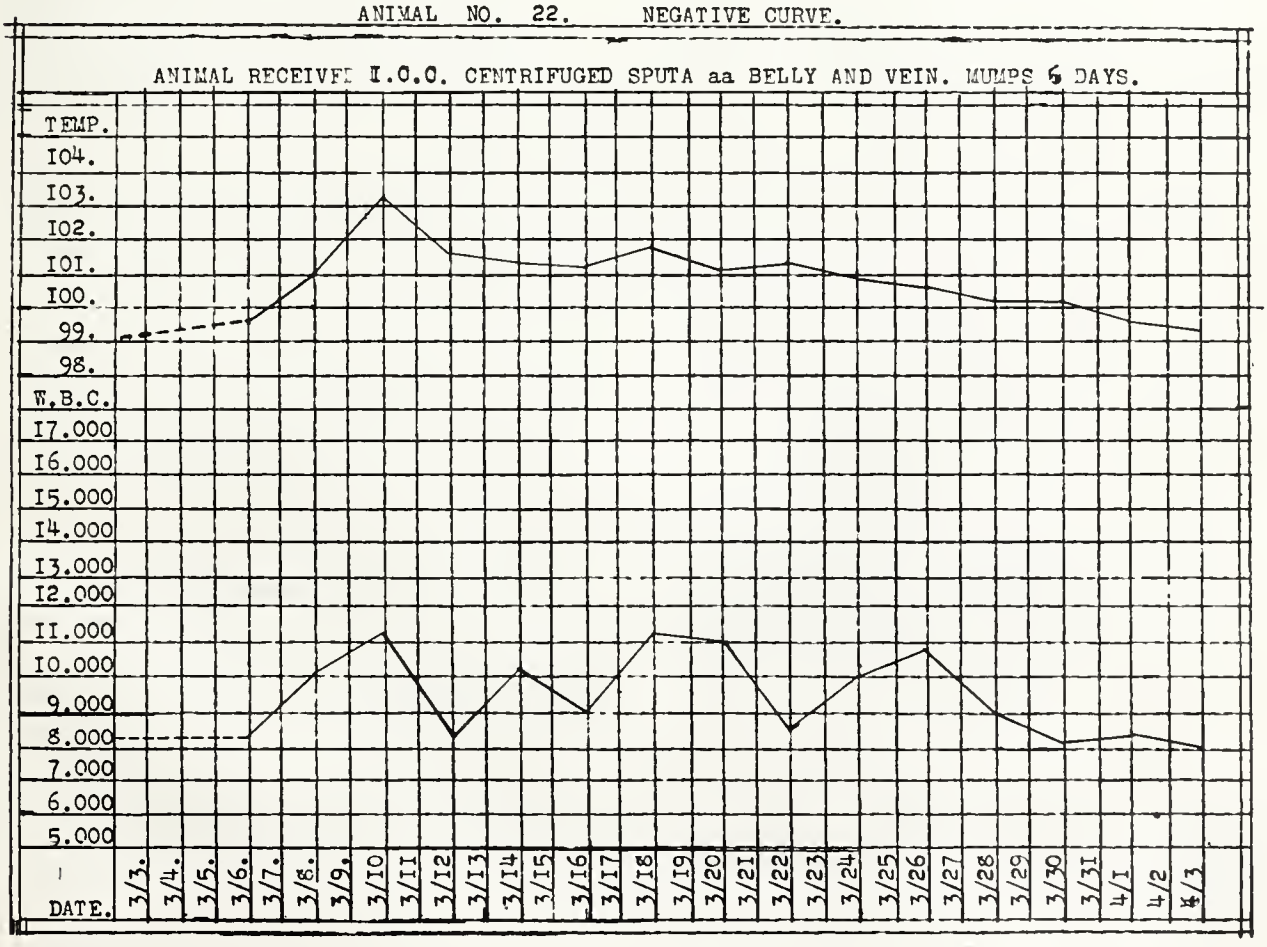
That this difference between positive and negative animals can be explained on the basis of the injection of organisms into the animal, or to the injection of a foreign substance composed of a variety of substances as is the saliva, hardly seems tenable, in view of the fact that those cases showing negative findings were injected with centrifuged sputa that differed from that which yielded positive findings, in no other respect than the time that had elapsed from the inception of the mumps till the specimen was secured. And further, the blood of the patients giving positive sputa readings also gave positive readings. The animals injected with sputa from normal patients did not yield a curve that could be confused with those recorded as positive.

Data obtained on the subsequent animals. Pig No. 30 received 2 cc. of serum from an active mumps case and ran what was termed a positive curve. After the lapse of three weeks he again received 2 cc. serum from an active mumps case and did not run a positive curve. Animal No. 31 received 2 cc. of serum from the same patient who furnished the serum for animal No. 30 second condition and ran a positive curve. Animal No. 32 received 2 cc. of serum from an active case and ran a positive curve. The chart shows that this pig had a prompt and vigorous reaction, evidently from the introduction of a foreign protein. This reaction brought up the leucocytes to 23,000 by the third day. This was rather a short reaction and on the twelfth day, we find the leucocyte count below 13,000. From then on the leucocyte count and the temperature readings produced a curve which in all major points was quite like the positive

ANIMAL NO. 20. POSITIVE CURVE.



ANIMAL NO. 22. NEGATIVE CURVE.



mumps curves. A month later this same animal was taken up and given 2 cc. of serum from a patient who had had the mumps years previously. Plotting the readings of the leucocytic count a temperature change placed the second curve in the negative column. Of the control animals receiving pure cultures of the organisms isolated, all recovered but the one previously mentioned as having died of streptococcic septicemia. This would tend away from bacterial etiology.

To explain the difference between the positive and the negative curves from an etiological standpoint would be a difficult proposition, and from the data at hand, it would seem better not to attempt to draw any definite conclusions, but to use the findings as offering suggestions for further study and investigation. There are certain facts in the work, however, that can not be overlooked. (a) In all the positive cases the curves are similar in time of incubation, stadium of the curve and duration of the disease. (b) Animals injected with a specimen of blood drawn at the time the mumps temperature curve was at or near its apex yielded a reading that was entirely similar to that seen where the positive centrifuged sputa was used. (c) Animals injected with a specimen of blood drawn during the height of the orchitis complication, did, in two instances give positive readings, while the sputa collected at the same time gave negative results. (d) Animals injected with the centrifuged sputa collected later than five days after the first appearance of the mumps did not yield a positive reaction.

Whether this could be due to the disappearance of a substance that was apparently in the sputa and the blood at an earlier date, or whether it could be due to the fact that the substance was undergoing some form of cyclic change, and that it was neither filterable, centrifugable nor toxic, is merely a matter of conjecture and awaits much additional investigation.

In conclusion let me express my appreciation to Major Allen J. Smith, who was then chief of the service, for his generous assistance and his kindly and suggestive criticism.

Thanks are due the technicians for their co-operation in the work.

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(1) Dick, George F. Journal of Infectious Disease, Vol. 23, No. 6, December, 1918.

(2) Wollstein, Martha. Journal of Experimental Medicine, Vol. 28, No. 4, October, 1918.

DISCUSSION.

Dr. F. W. Carruthers (Little Rock): I think that this paper deserves to be complimented, and the doctor should certainly receive the compliments of this society for his study. I think this is a really valuable paper. It interests me from the standpoint of the number of cases, and the time that is lost by such an infection. Fifteen hundred cases of mumps, running a course of twelve days, necessarily means eighteen thousand days lost. Divide that by three hundred and sixty, the approximate number of days in a year, and that would mean fifty years time lost. Multiply that by what a man's services are worth at a minimum of three dollars a day, and that would mean $54,000,00, a total loss among fifteen hundred cases. That, to me, is very interesting. Another thing that is demonstrated there that is worth while, is that a case of mumps well developed means an immunity from that time on. That in itself is certainly worth something. I want to compliment the doctor again for his paper.

Dr. E. H. Hunt (Clarksville): We all understand that one attack of mumps renders immunity; but, maybe I don't know mumps every time. I have had several patients that have had several repeated attacks of parotitis, and I called it mumps once or twice, and finally I had to quit calling it mumps. I would like for the doctor to explain what I was having in those cases. They just ran along the typical course like mumps; the glands swelled up; they would take a bite of pickle or lemon, and they would squirm around and make a wry face. I would like to know what that was that I was treating.

Dr. Hoge (in response): That kind of case sometimes comes into existence, and it seems they are a type of mumps. Martha Wollstein, of the Rockefeller Institute of New York, made quite a little study of this subject of mumps. She used a cat, however, instead of a guinea pig. She did some work on cases similar to the one described. She classes them not specifically mumps orchitis, I believe, but another type of orchitis.

Mumps are frequently followed by an orchitis, or again it may be a primary orchitis with a parotitis, secondary. When the parotitis does occur there is usually rendered an immunity. An orchitis alone may not render an immunity.

Dr. Hunt: Is there any way we can tell the difference? I understand the high and low mumps, because I have gone through it.

Dr. Hoge: There should be no difference. They should be one and the same thing—just a matter of where the disease appears first.

"A wide-awake, progressive County Society is of incalculable benefit to the members that attend regularly. It tends to make better physicians of us and presents an opportunity to become acquainted with one another, which conduces to a spirit of good fellowship. Regular attendance becomes a habit just as non-attendance may become one."

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The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

REPORTS AND DUES OVERDUE.

All the county societies have not yet sent in their reports and remittances. To secure representation at the annual meeting it is imperative that these matters receive prompt attention. We want every county society in the State represented in the House of Delegates when it is called to order on the first day of the meeting. Failure to send in reports and dues may result in some delegates being ineligible. See to it that your county society is not on the delinquent list.

THE ANNUAL MAY MEETING.

Let us remind every reader of the Journal that the annual meeting of the Arkansas Medical Society will be held in Little Rock May 17, 18 and 19. Preliminary plans are already well under way, but those who desire to contribute a paper or take part in the program in any way, are asked to get into communication at once with Dr. St. Cloud Cooper, Fort Smith, chairman of the Program Committee, or send their names and titles of paper to be read to the office of the Journal. In two short months the date of the meeting will have arrived. You must recognize the fact that the committee must have proper time in which to prepare the program and if there is delay in sending in requests and names of papers there may be some disappointments.

Again this year we urge all who are competent to take some part in the program. The State society has plenty of splendid material; practitioners of long experience and learning. It is the duty of such members to come to the front and not hide their light under a bushel, but let it so shine that others may see their good works. So write at once; because in the April issue we hope to give the program practically complete.

The motif of our annual meeting is to be "home coming." We wish to stress this feature energetically and have invited all our "old-timers" in other States to visit us, "lest auld acquaintance be forgot."

DO YOU WANT A VISITOR AT YOUR NEXT COUNTY MEETING?

In chapter 7, section 2 of the Constitution and By-Laws of the Arkansas Medical So-

ciety the duties of councilors are thus defined:

"Each councilor shall be organizer, peacemaker and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into conditions of the profession and for improving and increasing the zeal of county societies and their members."

We understand that several of the councilors are ready now and eager to make a tour of their respective districts. They are prepared to take some guest with them who will read a paper, make an address or otherwise take some active part in the program. Visitors should always be welcome; they help bring out a good attendance at a county society meeting. There are county societies which need some stimulation (no reference intended to the well-known Volstead Act). There are county societies at whose meetings the attendance and interest are below par. Is yours such an one? If so, apply the remedy.

Whether it is or not a visitor and a guest will not hurt any. It may help a lot. If any county cares to take advantage of this opportunity and will notify the office of the State secretary, he will gladly assist in having the visits made at some early date.

CANCER CONTROL CAMPAIGN.

The State-wide campaign for funds with which to carry on the cancer control work has been started and will be vigorously carried on, according to Dr. Dewell Gann, Jr., chairman of the State Committee. The campaign was inaugurated February 25, with a dance at the Shriners' Temple in Little Rock, for which event, it is said, 250 tickets at one dollar each, were sold.

Arkansas is keeping up with other States in this nation-wide movement. The gratifying results of the national tuberculosis control work and the fact that while the death rate of tuberculosis has decreased while that of cancer has increased, should serve to encourage the effort to reduce the terrible mortality from cancer which is taking an annual toll of 100,000 lives; and it is pretty well established that cancer mortality could be very greatly reduced if only the symptoms were recognized in the early stages. Not only the afflicted themselves fail to recognize the early symptoms but frequently physicians fail to do so, by neglecting to examine thoroughly.

The facts about cancer, with descriptions of early symptoms, will be given to the people of the State by literature scattered broadcast and furnished by the National Cancer Control Committee. Funds are needed for this comprehensive distribution of literature, which will be sent to clubs, schools, ministers, civic bodies; in fact, to any and all organizations or individuals interested in the work. It is planned to have physicians to attend conventions, mass meetings and other public gatherings, to deliver addresses on cancer and urge immediate treatment of any suspicious disorder.

Governor Thomas C. McRae has pledged his support to the movement and the Federation of Women's Clubs, the Federation of Labor, various civic organizations, welfare societies, ministers, educators and other influential bodies and individuals will support the campaign zealously.

Abstracts.

THE SCHICK TEST.

In the opinion of Abraham Zingher, New York (Journal A. M. A., February 18 1922), standards for official control of Schick outfits are strongly advisable. Careful standardization of Schick outfits in guinea-pigs necessitates that there should be at least one minimal lethal dose in each individual outfit. Such an outfit would be sufficient for from thirty-five to forty-five tests. Outfits for the Schick test sufficient to make five or ten tests can not be tested for accuracy except in the human being. Undiluted bulk toxin, accurately and carefully diluted, is most suitable for the testing of large numbers of individuals in schools, institutions, hospitals, clinics, etc. Two methods are given for the dilution of bulk toxin. The dose of toxin for the Schick test is 1-40 minimal lethal dose in 0.2 cc. This amount has been found to be the equivalent of 1-50 minimal lethal dose in 0.1 cc. The larger amount of the more diluted toxin is easier to inject, and the results are more likely to be accurate. The positive Schick reactions also in susceptible individuals who have not even a trace of antitoxin are not likely to be so severe and show the superficial necrosis of the skin noted with the more concentrated

dilution. The dose of heated toxin for the control test has, in addition, a 20 per cent excess to allow for slight deterioration by heating of the reacting autolyzed protein. Too much emphasis can not be laid on the accurate dilutions of the toxin for the Schick test and for the control test. Such dilutions represent the very foundation for any successful attempt in using the Schick test in the control of diphtheria.

A DIETARY CONSIDERATION OF ECZEMA IN YOUNGER CHILDREN.

In about 20 per cent of the cases analyzed by Edward Scott O'Keefe, Boston (Journal A. M. A., February 18, 1922), there appeared a lowered fat digestion, shown either in the form of free fat or as a definite excess of soap in the stools. In about half this number, or 10 per cent, there has been evidence, clinical or laboratory, of a carbohydrate indigestion. All patients are subjected to protein skin tests. In considering the results of these protein sensitization tests, the patients are divided into: (1) the breast fed and (2) the bottle fed and older children. Among 131 cases of the second class there occurred forty-five instances, or 35 per cent, showing sensitization to one or more of the common food proteins. The foods showing a positive reaction are, in order of frequency, egg, milk, potato, wheat and oat, and an occasional reaction among other foods. The aim of treatment in these cases has been to eliminate, when possible, the offending protein. When this is not practicable, as in the bottle fed baby, the aim has been to secure as thorough a gastric digestion of the protein as is possible. This was sought by careful regulation of the diet in order that it might be proper for the child's age and digestive powers. Any factor in the diet which interfered with thorough and complete digestion of the protein was eliminated. None of these breast fed babies gave any evidence of a fat or a carbohydrate indigestion. Sixty per cent of them did give evidence of a protein indigestion, as manifested in the positive cutaneous reaction.

The aim of treatment should be to secure complete digestion of ingested protein, either by improving the digestive function or by limiting the intake of offending proteins. Sensitization of the nursing apparently does occur through foreign proteins ingested with breast milk.

Personals and News Items.

Dr. L. T. Evans has returned to Mt. Pleasant after a course at Tulane.

Dr. G. E. Tucker has moved from Bigelow to El Paso, Texas.

Dr. W. E. Acree has moved from Huntsville to Kingston.

Dr. J. W. Stephens has moved from Hoxie to Minturn.

The physicians of Cleburne County met on February 7, 1922, at Heber Springs, and organized a county medical society.

PERSONAL WORD.—Have you paid your annual dues to the State and county societies? If not, do so today.

Surgeons of the first group meeting, comprising Tennessee, Arkansas and Kentucky sections of the American College of Surgeons, met February 27, in Memphis.

Dr. Wm. Britt Burns, Memphis, president of the Tennessee State Medical Association, cordially extends an invitation to Arkansas physicians to attend their annual session in Memphis, April 11-13.

Dr. W. P. Parks, for the past eight years superintendent of Hot Springs National Prak, tendered his resignation to the Department of the Interior, February 6, 1922. Dr. Clarence Warring of the United States Public Health Service has been appointed to succeed Dr. Parks.

"Alcohol, Tobacco and Drug Cures," a pamphlet issued by the Propaganda Department of the Journal of the American Medical Association as part of its work in giving the public the facts regarding the nostrum evil and quackery, is now available. Price, 15 cents.

Another on "Consumption Cures, Cough Remedies, Etc." Price, 30 cents.

Orders should be mailed to the Propaganda Department, Journal of the American Medical Association, 535 North Dearborn Street, Chicago.

EARLY HISTORY OF THE JOHNSON COUNTY MEDICAL SOCIETY.

By R. N. Manley, M. D.

The Johnson County Medical Soeiety was organized at Clarksville, June 2, 1884, with the following as charter members: Howard Ford, Cabin Creek; J. J. Houston, Cabin Creek; C. E. Robinson, A. M. McKennon, J. P. Mitchell, Ed Greene, of Clarksville; I. B. Houston and R. B. West, Hartman; David Norvill, Hoganville; W. R. Hunt and C. E. Frost, Coal Hill; Isaac Newton, Knoxville; Thomas Stephenson, Piney.

C. E. Robinson, now of Little Rock and A. M. McKennon and W. R. Hunt of Clarksville, are all that are left of the charter members, and Dr. Hunt being the only one still engaged in the praetiee.

The following program was arranged for the second meeting: Dr. Ford, Essay, Germ Therapy; Dr. Greene, Essay, Neurology; J. J. Houston, Essay, Hematuria; C. E. Frost, Essay, Lobar and Catarrhal Pneumonia, Their Causes and Differences.

Dr. Ford excused himself for not getting up an essay on the subject assigned to him, stating that it was a question unsettled and that he had no books to refer to.

Dr. Montgomery became a member in August, 1884; Dr. John Coyle and Chas. Clark became members in October, 1884. Drs. Linzy and Zachery became members in December, 1884.

At the Deeember, 1884, meeting a fee bill was adopted that stood unehanged in the main for many years.

Dr. J. D. Laster became a member in April, 1885.

The meetings were called to order at 9:30 a. m., 12 to 1 recess for dinner, and they adjourned late in the afternoon.

It seems that Dr. J. D. Laster was the first member to die. Dr. Sherbum and Dr. Huddleston, now of Conway, beeame members in October, 1886.

Dr. J. P. Mitehell was the first president serving one year; Dr. C. E. Robinson, the first seeretary serving to 1887. All the minutes of the society from the time it was organized ineluding the meeting in April, 1887, were written by him.

They may not have known as much in that day about "bugs" as we do today, but they were the real "Salt of the Earth," and my hat is off to them.

We need now some of their ideas and especially with regard to organized medicine, as the reeord shows they were usually present.

THE ST. LOUIS MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

The arrangements of the St. Louis profession for the meeting places for the session of the A. M. A., which is to held in their eity May 22-26 next, are singularly fortunate and convenient; never has the assoeiation been so well favored in this respeet. The district in which the meeting is to take place is at the west edge of the business section of the eity, easily aceessible from all directions by street car or otherwise, and not more than fifteen minutes street car ride from the most distant hotel. The grouping of the meeting plaees is so eompact that should one walk from the registration building (Moolah Temple) to the farthest hall it can be done in ten minutes or less; from section to section is a matter of from one to five minutes. The convenienee of the location and arrangements of the different halls is more outstanding than in any other city in which the assoeiation has met, and a decided improvement over the accommodations which were had at the meeting in St. Louis, 1910.

The registration office, postoffice and commercial exhibit are to be in the Moolah Temple (Shrine) a beautiful and commodious building on Lindell Boulevard, two bloeks west of Grand Avenue. At the other extremity of the group is the Odeon, the home of the St. Louis Symphony Orchestra, with a main hall which seats better than 2,000, and several lesser halls. The main hall will be used for the opening session. Its aeoustics are particularly good and suited to our purpose. The sections on Practiee of Medicine and of Diseases of Children meet here. In the assembly hall of the building the sections on Pharmacology and Therapeutics, and on Pathology and Psysiology will meet. (It will be noted that there has been an aim to foregather closely allied sections). The Sheldon Memorial, a very beautiful new hall on Washington Avenue, one-half block west of Grand Avenue, which most admirably meets all requirements, will be the meeting place of the sections on Ophthalmology, and Laryngology, Otology and Rhinology. The section on Surgery, General and Abdominal, and on Obstetrics, Gynecology and Abdominal Surgery, will be held

in the Third Baptist Church on Grand Avenue, a situation well suited to the demands. The sections on Orthopedics and Nervous and Mental Diseases will meet in the Law School of the St. Louis University, on Lindall Avenue, a few steps west of Grand. The hall easily seats 500 and is both comfortable and convenient. Dermatology and Syphilis and Urology will use the large Union Methodist Church, on Delmar Avenue, just west of Grand, which meets every requirement. The sections of Gastro Enterology, Proctology and on Preventive Medicine will use the large hall in the Musicians' Club on Pine Street, east of Grand Avenue, and next to the building of the St. Louis Medical Society, where the House of Delegates will hold its sessions. The section on Stomatology is assigned to the assembly hall of St. Peter's Parish House, on block west of Grand on Lindell. Immediately in this district will be found three of St. Louis' most important clubs, the St. Louis, University and the Columbian. Restaurants catering to every grade of patronage are numerous in the district and precautions have been taken to insure that normal rates continue during the meeting.

The St. Louis profession is preparing for an unusual attendance; hotel reservations are coming in rapidly but it is proposed that even the late comer shall be comfortably housed. The wise traveler, however, makes his reservation as early as he finds it possible. Dr. M. B. Clopton, 3525 Pine St., St. Louis, is chairman of the Committee on Sections and Section Work.

LES MODES.

"Thousands die for fashion," is the unsupported statement of an obscure divine who lives somewhere in Ohio. He complains because our ladies bare the chest, wear silk hose and low shoes, and thereby invite disease and death.

To a medical man this statement is the acme of foolishness and only shows how any irresponsible individual may make such a statement and go unchallenged.

Now, what are the facts in this case, as observed by the medical profession? Since the ladies have discarded the style of dressing the neck high and have adopted the fashion of exposing the larynx and well down the trachea, thus exposing these parts to the free circulation of air and sunlight, we as medical men, seldom see a case of laryngitis, tonsilitis or quinsy among our lady patients; nor do they cough. As a proof of this statement, go into any church or theater and notice carefully who it is that does the coughing; and you will find ten men and boys to one woman or girl who offends. The reason is the ladies' throats and chests have been exposed to the elements and they do not take cold easily.

It is a well known fact among medical men that exposing the chest does not subject the chest to an attack of pulmonary tuberculosis, but rather tends to strengthen the individual and thus keeps up his power of resistance to the specific infection of tuberculosis. If this be true of the organs of respiration, why may it not be true of the feet and legs? Who ever gets to be healthier than a barefoot boy or girl?

The writer, as a member of the medical profession, believes in, and advocates the short skirt as a sanitary measure; and if the silk hose add beauty to the scene he still does not object. To say the present style of our ladies' dress adds anything to our morbidity or mortality statistics is not true.

Our Ohio friend objects also to the dress of our high school girls, saying it leads to snobbery and caste, and, then, many a poor man's daughter, though, well born with brains and character, can not go because of the expense. There is some truth in this financially, yet, it would seem to a medical man that a girl who has birth, brains and character is the possessor of those attributes most coveted among men, and she should be content anywhere, knowing to her has been given those attractions which many of her associates do not and never can possess. I hear some one repeat: "As well be out of the world as out of fashion!"

No, it is not the dress of our school girls that keeps many away, but rather the fact that those who refuse to go to school unless fashionably dressed do not possess those rich and beautiful characteristics named as birth, brains and character.

Evidently our Ohio friend has slopped over in his efforts to change the fashion of our ladies' dress by trying to frighten them as to the dangers to their health by reason of bare chests, silk hose and low shoes. The medical man, well versed in that intricate thing known as human nature, would beg to suggest that reform in dress might be brought about by simple ridicule. If a woman is once told that a thing is not becoming or the thing

makes her ridiculous, she is apt to say, "Never again!"

That some of the styles are ridiculous, especially to the medical man, who is also an anatomist, is often manifest to him by reason of the extremely short skirt worn mostly by the "Flapper." This very short skirt is not only at times ridiculous, but becomes painful to the eye of the trained observer and anatomist on account of the marked absence of beauty or proportion. Some limbs are bowed, some look as if they might be edematous and others appear as though they were about ready to break down and endanger the life of the owner. At this point we hear some prude say, "Why observe so closely?" One might as well say, "Why notice automobiles?" when the streets are full of them.—*S. U. King, M. D.*, Little Rock, Arkansas.

Obituary.

DR. J. J. JOHNSON—James John Johnson, M. D., Biggers, died February 8, 1922. Aged 54.

DR. L. H. HALL—L. H. Hall, M. D., Pocahontas, died February 20, 1922. Aged 55.

County Societies.

ASHLEY COUNTY.

(Reported by L. C. Barnes, Sec.)

The Ashley County Medical Society met in Hamburg January 18, 1922. Meeting called to order by J. W. Simpson.

Officers elected for 1922: President, C. E. Spivey; Vice-President, J. W. Simpson; Secretary and Treasurer, L. C. Barnes; Delegate to State Society, J. W. Simpson; Alternate, B. F. George.

After routine business had been disposed of, a discussion on the practice of medicine was generally participated in.

The next meeting will be in Crossett.

RANDOLPH COUNTY.

(Reported by H. L. Throgmorton, Sec.)

The Randolph County Medical Society met in Pocahontas, February 16, 1922. President Brown in the chair.

Members present: Brown, Hamil, T. Z. Johnson, R. R. Johnson, Pace and Throgmorton. Visitor, J. T. Poindexter.

Officers elected were: President, W. E. Hamil; Vice-President, R. R. Johnnson; Secretary-Treasurer, H. L. Throgmorton; Delegate to Annual Meeting, J. W. Brown; Alternate, T. Z. Johnson; Censor, W. E. Hughes.

MONROE COUNTY.

(Reported by J. H. Phipps, Sec.)

The Monroe County Medical Society met in regular session at Brinkley, January 14, 1922, at 6:00 p. m., at the moving picture theatre to see the motion pictures of Obstetrics and Gynecology, which were made by the late Prof. Werthein and Prof. Weibel, in Vienna, Austria. The pictures were interesting, but the technic elicited some criticism. At the conclusion the society adjourned to the city hall in regular session. Several cases of gastro-intestinal disturbances were presented, which were discussed by McKnight, Stout, Stallings, Houston and Phipps.

CLEBURNE COUNTY.

(Reported by J. T. Matthews, Sec.)

The Cleburne County Medical Society held its first meeting February 7, 1922, at Heber Springs.

Present: W. J. Hornbarger, S. A. Turner, C. F. Crosby, S. J. Ward, J. T. Matthews, Heber Springs, and H. J. Hall, Higden.

On account of very unfavorable weather the attendance was not as large as was anticipated.

Officers elected for the ensuing year were: President, W. J. Hornbarger; Secretary, J. T. Matthews; Treasurer, S. A. Turner.

Much interest was manifested and it is expected that many helpful meetings with larger attendance will be had in the future.

MONROE COUNTY.

(Reported by J. H. Phipps, Sec.)

The Monroe County Medical Society met in regular session at Clarendon December 14, 1921, at 3:00 p. m. Called to order by J. H. Phipps, president.

Members present: Phipps, Boswell, Thomas, McKnight, Stout, Terry and Houston.

Dr. T. J. Stout of Brinkley presented an interesting report of a case of "Pernicious

Vomiting in Pregnancy," which was discussed by McKnight, Thomas and Boswell. Drs. Stout and Boswell were appointed by the president to read papers at the next meeting.

The following officers were elected: President, C. H. McKnight; Vice-President, W. L. Boswell; Secretary-Treasurer, J. H. Phipps; Censors, Thomas and Stout; Delegate to Annual Meeting, E. D. McKnight; Alternate, W. L. Boswell.

LAWRENCE COUNTY.

(Reported by A. J. Clay, Sec.)

The Lawrence County Medical Society met in regular session at Hoxie, March 1, 1922, at the Methodist Church. W. W. Hatcher, president, called the meeting to order. The minutes of the preceding meeting were read and approved.

Present: Drs. Ball, Clay, Guthrie, Hatcher, Hughes, Land, McCarroll, Swindle and Thomas.

Clinical case: Mercuric Poisoning, Icterus associated with Influenza.

The essayists were, H. R. McCarroll and J. C. Hughes, both having just completed the government post-graduate course in venereal diseases at Hot Springs.

The former spoke on the "History and Modern Treatment of Syphilis," the latter on "Gonorrhea."

The subject of building a Hoxie-Walnut Ridge Hospital was discussed.

CHICOT COUNTY.

(Reported by J. S. Wilson, Sec.)

The Chicot County Medical Society met at Lake Village February 8, 1922, at 2:00 p. m. Present: Drs. Barlow, Douglas, Craig, Rigdon, Clark, McGehee, DeLaney and Wilson.

A motion was made by Dr. McGehee that this County Society endorse and give its utmost moral and financial support to completion of the contemplated co-operative community hospital for Southeast Arkansas. This was unanimously endorsed and carried as amended by Dr. Barlow to read regardless of its location.

Officers elected for 1922: President, S. W. Douglas, Eudora; Vice-President, E. E. Barlow, Dermott; Secretary, J. S. Wilson, Lake Village; Delegate to the State Society, H. H. Parr, Eudora; Alternate, B. C. Clark, McGehee.

Motion carried that the county dues be made fifty cents. Motion also carried that the County Society meet on the second Thursday of every month. Papers were read by Drs. DeLaney and Wilson.

At the conclusion of scientific program the meeting adjourned.

Book Reviews.

Diseases of Children.—Designed for the use of students and practitioners of medicine. By Herman B. Sheffield, M. D., New York City. 238 illustrations mostly original and nine color plates. Published by C. V. Mosby Company, St. Louis, Mo. Price, $9.00.

In this book is found the latest knowledge of the theory and practice of the diseases of infancy and childhood.

It is divided into fourteen sections corresponding to the modern conception of the causation of the disease in question.

1920 Collected Papers of the Mayo Clinic, Rochester, Minn. Octavo of 1,392 pages, 446 illustrations. Published by W. B. Saunders Company, Philadelphia. Price, $12.00 net.

This volume contains interesting and instructive papers of the Mayo Clinic, covering over one hundred subjects. They are divided as follows: Alimentary Tract; Urogenital Organs; Ductless Glands; Heart; Blood; Skin and Syphilis; Head, Trunk and Extremities; Nerves; Technic and General.

Practical Psychology and Psychiatry.—For use in training schools for attendants and nurses and in medical classes, and as a ready reference for the practitioner. By C. B. Burr, M. D., Medical Director of Oak Grove Hospital (Flint, Michigan), for Mental and Nervous Diseases. Fifth Edition. Revised and enlarged with illustrations. Published by F. A. Davis Company, Philadelphia. Price, $2.00.

We find important additions in this new edition with a new chapter on the prevention of insanity. The classification is in keeping with the recommendations of the National Committee for Mental Hygiene.

Operative Surgery.—By J. Shelton Horsley, M. D., F. A. C. S., attending surgeon St. Elizabeth's Hospital, Richmond, Va. With 613 illustrations. Published by C. V. Mosby Company, St. Louis. Price, $10.00.

One of the features in this book is laid upon the preservation of physiological function and the interpretation of the biological processes that follow surgical operations.

In this volume Dr. Horsley covers the operations in general surgery, step by step,

with a series of illustrations. The drawings are by Miss Helen Lorraine, a Max Brodel pupil. She worked three years under Dr. Horsley's personal supervision making the illustrations for this volume.

Essays on Surgical Subjects.—By Sir Berkeley Moynihan, K. C. M. G., C. B., Leeds, England. Octavo of 253 pages, illustrated. Published by W. B. Saunders Company, Philadelphia, 1921. Cloth, $5.00 net.

This book contains a number of well written essays that have been published at various times during the last few years. The titles are as follows: "The Murphy Memorial Oration," "The Ritual of a Surgical Operation," "The Diagnosis and Treatment of Chronic Gastric Ulcer," "Disappointments after Gastro-Enterostomy," "Intestinal Stasis," "Acute Emergencies of Abdominal Diseases," "The Gifts of Surgery to Medicine," "The Surgery of the Chest in Relation to Retained Projectiles," "The Most Gentle Profession."

General Surgery.—Edited by Albert J. Ochsner, M. D. Volume II. Price, $2.50.

Eye, Ear, Nose and Throat.—Edited by Casey A. Wood, M. D., Albert H. Andrews, M. D., George E. Shambaugh, M. D. Volume III. Price, $1.75.

Gynecology.—Edited by E. C. Dudley, A. M., M. D. Obstetrics.—Edited by Joseph B. DeLee, A. M., M. D. Volume V. Price, $1.75.

Pharmacology and Therapeutics.—Edited by Bernard Fantus, M. S., M. D.

Preventive Medicine.—Edited by Wm. A. Evans, M. D., D. P. H., with the collaboration of G. Koehler, M. D. Volume VI. Price, $1.75.

Published by The Year Book Publishers, 304 S. Dearborn St., Chicago. Price of the series of eight volumes, $12.00.

This series is published primarily for the general practitioner, and at the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire.

A Laboratory Manual and Text-Book of Embryology—By Charles W. Prentiss, late Professor of Microscopic Anatomy, Northwestern University Medical School, Chicago. Revised and rewritten by Leslie B. Arey, Professor of Microscopic Anatomy, Northwestern University Medical School. Third Edition. Enlarged. Octavo volume of 412 pages with 388 illustrations, many in colors. Published by W. B. Saunders Company, 1920, Philadelphia. Cloth, $5.50 net.

This volume gives an account of human embryology adopted especially for the physicians and the medical student. The contents as a whole have been revised and much new material has been added by Dr. Arey.

"Embryology not only throws light on the normal anatomy of the adult, but it also explains the occurrence of many anomalies and monsters, and the origin of certain pathological changes in tissues."

Epidemiology and Public Health.—A text book and reference book for physicians, medical students and health workers. In three volumes. By Victor C. Vaughan, M. D., assisted by Henry F. Vaughan, M. S. D. P. H., and George T. Palmer, M. S., D. P. H. Volume I. Respiratory Infections. Published by C. V. Mosby Company, St. Louis. Price of volume, $9.00.

A great addition to the literature of hygiene and public health is now available with the presentation of this volume. From the chapters on measles, we wish to copy a little valuable information Dr. Vaughan endeavors to impress upon the reader:

(1) The only natural immunity to this disease is that acquired by one attack. (2) There is no increased resistance to this disease with advancing years. (3) Uncomplicated measles seldom or never causes death. (4) Measles is a serious disease, inasmuch as it opens avenues to other infections from without and gives opportunity for the development of latent infection already within the body. (5) Patients with this disease should be protected not only from those who are suffering from other infections, but from those with the same disease. (6) The ultimate result in measles depends largely upon the care given the patient. (7) Since measles has been transmitted to animals, a thorough search should be made for a practical and safe vaccine. (8) Epidemics of measles are serious in armies and other great assemblies of susceptible men because of the disorganization of the medical service by the large numbers falling ill and demanding hospitalization at one time. "This fact was deeply impressed upon me while observing the progress of this disease at Camp Wheeler and other southern camps," says Dr. Vaughan.

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Original Articles.

ENCEPHALITIS.*

W. M. McRae, M. D., Little Rock.

Within the last few years we have had introduced into America two diseases of similar nature affecting the central nervous system: Poliomyelitis and Lethargic Encephalitis, or Sleeping Sickness as it is commonly called; and although they are not new diseases in medicine, it may be said of the latter especially, that it is new to us in this country. In 1907 poliomyelitis made its appearance in this country and owing to the lack of knowledge of the cause, mode of transmission and management of the disease, its spread assumed the proportions of an epidemic in New York State, in 1916, which was quite alarming.

Much research was done throughout the country which finally culminated in the discovery of a specific virus by Flexner and Noguchi, which they isolated from the nasal secretion of those suffering acutely from the disease and others of the ambulatory or abortive type as well, the latter "carriers" being responsible for its rapid dissemination.

It was accordingly made a reportable disease, subject to the same board of health rules as other infectious diseases, and a gradual subsidence of the epidemic resulted. Whether predisposing causes may have played a part in precipitating this epidemic the isolation of the specific agent which caused the disease and the consequent isolation of those suffering from it, must be given the credit for its almost total disappearance. This short history of the control of poliomyelitis is given on account of the bearing it may have on the manner in which we handle our cases of encephalitis to prevent its becoming epidemic also.

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

What I consider to be the most important facts obtainable so far about encephalitis, together with some statistics of the advent, occurrence and mortality in our own State will be mentioned; after which I wish to report a case of the irritative type, in which drowsiness or lethargy, the predominating symptom in most cases, was notably absent.

Advent.

Encephalitis was first recognized in the United States in 1918 and was introduced into this country from Europe, where it had existed in epidemic form as early as 1916; but only within the last few months has it attracted any very considerable attention as having a specific cause and a distinct pathology of its own.

In several States where epidemic encephalitis is most prevalent, it has been made a reportable disease, and no doubt, will soon become generally so; but as it has not yet been made reportable in this State, statistics as to the number of cases are not available.

No cases were reported here in 1920 and only four so far in 1921—two from Little Rock, one from White County and one from Stuttgart.

Fifteen death certificates have been recorded as having been due to encephalitis—eleven white and four colored—as follows: January, one white, one colored; February, one colored; March, one white, one colored; April, one white; May, none; June, three white, one colored; July, none; August, one colored; September, one white, two colored; October, one white; December, one white. No seasonal occurrence is shown here, though a record kept by the Metropolitan Life Insurance Company on a total of 395 cases, shows that in 1920, 84 per cent of deaths occurred between January and June.

There seems to be no sex difference in the relative incidence of the disease, but the age factor is an important one, half of these

deaths occurring between the ages of twenty-five and fifty-four.

Clinical Types.

Several clinical types of the disease have been described as follows: The lethargic type, the cataleptic type, the paralysis-agitans type, the polioencephalitic type, the anterior and posterior poliomyelitic type, the epileptic maniacal type, and the acute psychotic type. Factors which determine these different types are the severity of the infection, the involvement of different areas of the brain and different cranial nerves, the extent of involvement of the spinal cord and perhaps to some extent the stage of the disease at which the patient is first seen.

It is entirely possible that several of these types might be seen in the same patient at different stages of the disease and as is the case with all diseases in which the central nervous system is involved, the variety of types might be still further increased if observed by trained neurologists. However, such classifications present problems in nerve tracing that are very complex to most of us. Encephalitis has been closely identified with and thought by some to be a sequela of influenza.

In a number of cases of influenza the Pfeiffer bacillus has been found in the nerve tissue and meninges producing an encephalitis; but a failure to find the influenza bacilli in the pure types of lethargic encephalitis establishes a complete separation of the two diseases.

Very typical cases of encephalitis have been produced in animals by the inoculation of nerve substance from fatal cases, and nasal secretions from active cases, and by some workers the subsequent isolation of a diplococcus from the brain of these artificially produced cases have been claimed; but the question of accidental infection and very conflicting reports leaves the etiology of the disease still to be determined. The secretion from the naso-pharynx has already been strongly suspected of harboring the virus which transmits the disease, however, and when we recall that the greatest number of our infectious diseases are carried by the secretions from the respiratory tract, this must be looked upon as having a very important bearing on the prevention of its spread, even though the organism itself has not been isolated.

Gross Pathology and Symptomatology.

Grossly, the pathological findings in encephalitis are, in the central nervous system, the result of an active inflammation rather than a degenerative process, the greatest changes being found in the ganglia at the base of the brain, in the nuclei of the brain, the floor of the fourth ventricle, and around the fissure of Sylvius.

The coverings of the brain are but little involved and changes in the cord are rare.

The involvement in different cases, of different nuclei and ganglia, which are the deep centers of the cranial nerves, give rise to a wide variety of disturbances of function, of these respective nerves, which are manifested by such symptoms as drooping of the lids, double vision, unilateral and bilateral dilation of the pupil, loss of accommodation, protrusion of the eye balls, disturbance of taste; also salivary and lachrimal secretion and loss of function of muscles of mastication, according to whether the third, fifth, or some other of the cranial nerves are affected.

Other symptoms which are perhaps more constant and due to the disturbances of function of the central nervous system are the lethargy, said to be present in 80 per cent of cases; muscular weakness, tremors and twitchings; irritability and restlessness; loss of bladder control; occasional spasticity of muscles of neck and spasmodic contractions of muscles of abdomen and diaphragm.

One observer states that this contraction of the muscles of the abdominal wall, which resembles, but is not a typical hiccough, has been so constantly present that he has come to look upon it as one of the most reliable of symptoms. It was present throughout the case of my own, which will be reported later.

The diagnosis of encephalitis so far is clinical, based on the above symptomatology, and the exclusion as far as possible of diseases of known bacteriology.

Treatment.

There is no specific treatment for encephalitis. Symptomatic treatment and such measures as are used to keep the patient comfortable are largely questions of individual judgment in different types of the disease and may be brought out in the discussion.

Report of Case.

Patient male; age 52. Friday, December 24, patient was taken with rather severe pain of neuritic character in left arm and shoulder, extending up into neck and back of ear, severe enough to keep patient awake all night and in bed next day. On Monday, December 27, patient went to work in morning, but felt so badly, went home and took to bed. Complained of great pain in lower limbs, but no headache. First seen on Tuesday, December 28, temperature was 100; respiration, 36; pulse, 120; blood pressure—systolic, 152; diastolic, 110. Face suffused and perspiring; lips purple; eyeballs prominent, with congestion of vesicles of conjunctiva; pupil of left eye dilated, but both reacted to light. Eye background negative; very nervous and picking at bed clothes; talking incessantly and at random about occupation. Abdomen distended; stools normal; urine highly colored; muscular tremors marked; complained greatly of pain in legs; a peculiar jerking of the abdominal muscles simulating, but not identical with hiccough. December 29, 30 cc. spinal fluid were drawn; no increased pressure was noticeable and fluid was clear. Delirium increased from day to day and restlessness was so great that nothing gave complete relief. Some loss of activity of right leg and forearm was noted. Patient could be aroused and gave coherent answers to questions, but soon lapsed back into a semi-stupor and incessant occupational delirium.

December 30, patient still delirious with more anxious expression, but ceased to complain of pain in legs. Temperature from December 27 to December 30 was 99.6 in a. m. to 100 in p. m. On 30th, temperature rose to 101 p. m.; and on 31st, 102—highest temperature recorded. Respiration and pulse remained about same, 36-120.

January 1, patient became quieter and showed weakness, but continued to talk even in stupor until within an hour of death, which occurred on January 2, 10:30 p. m.

Laboratory Report.

Urine: Medium yellow; no sediment; reaction acid; appearance clear; specific gravity insufficient; sugar, none; albumen, trace; few finely and coarsely granular casts; two pus casts; bacteria, none; red blood cells, few; pus cells, very few; epithelial cells, very few; mucous, normal.

Blood. White cell count 6,000; malaria, negative; Wassermann, negative; differential count: Polys. 65; small lymph. 20; large lymph. 13; eosinophiles, two; spinal fluid, negative.

DISCUSSION.

Dr. H. Thibault (Scotts): In company with Dr. McRae I saw the case that he has just reported, and he has reported it so completely that I simply want to bring out one point. I have seen one other case that recovered. In entering the presence of these patients, you are immediately impressed with the fact that that man is sicker than the physical signs would indicate. That seems to be the impression that I have when I get where these patients are. I have only seen two cases; but every time I visited one of them I had that feeling and it has worked out to be a fact. In the patient that Dr. McRae has reported, outside of these nervous symptoms, this man didn't begin to fail in strength, as indicated in his circulation or any other way, until very close to the end. In this patient that I saw that recovered, he didn't have the irritated type; that is, he didn't lapse into the talkative stupor as was the case with Dr. McRae's patient; who, while he was somnolent, at the same time he talked about his occupation and other things, but he was perfectly rational when you aroused him between times. If you spoke to him, sometimes he was rather slow in bringing his mind to bear on the subject; but he discussed it rationally at the time. When he dropped off into this stupor, he began to talk about his business affairs or some occupation. The other patient simply stared at the ceiling, with dilated pupils; he had double vision. It was the first symptom that we had noticed. Both cases gave a history of slight cold preceding the encephalitis by ten to fourteen days. It was a week or ten days before the nervous symptoms appeared. This man that recovered was sick about five weeks before he was able to sit up, and he had contraction of the abdomen, but it was more confined to one place at the time; that is, certain muscle fibers would contract almost rhythmically for a certain length of time. If you turned him over, more of the abdominal muscles would contract, but he lacked that uniformity of movement that we have in singultus. There was evidence that this contraction was confined to part of the abdominal wall and not all of the abdominal wall. One peculiarity of this disease is that there is almost an entire absence of involvement of the auditory nerve.

Dr. E. E. Barlow (Dermott): It is not my purpose to discuss the paper, but wish to report a case that I had recently.

On the 15th of December, I delivered a full term baby, perfectly normal in every way. It remained normal for thirty days. On the night of January 15, about one o'clock, the usual hour for nursing, the baby failed to awake and when the mother took it from the crib to nurse it, she was unable to awaken it.

I was called at once and on my arrival I found the baby limp and very sound asleep. The reflexes were very feeble, the fontanels were bulging, the pupils a little dilated, respiration weak and temperature normal. The baby was unable to swallow and remained so for two weeks. During this time, we gave it an ounce of breast milk every two hours and about six ounces of water during twenty-four hours. Milk and water were administered by holding the mouth open and pouring it in just as you would pour it in a bottle. It went to the stomach by gravity.

At the end of two weeks, it began to swallow, symptoms, otherwise, remaining about the same. The elimination was poor and required a laxative. At the end of three weeks, it was able to nurse a little, but would soon become exhausted and turn the nipple loose. At the end of the fourth week, and from that time on, it was able to nurse. During the entire illness, the heart was very weak, but responded to one drop doses of tincture strophanthus every four hours. In addition to the strophanthus, I gave it one-half grain urotropine every four hours. I don't know that this did any good, but some one has said that urotropine was eliminated through the spinal fluid and I thought if that were true, it might be of some benefit as an antiseptic. The fontanels remained tight for some eight weeks, becoming normal gradually and as they became normal so did the baby's general condition improve. It is to all appearances perfectly well at this time. This was a very interesting case to me and I watched it very closely. The most we did for the baby was to leave it in its crib undisturbed and give it the nourishment and plenty of water. I believe this was a true case of encephalitis lethargica, and all we did was to support the patient while the disease ran its course. This is the youngest case I have seen any record of.

Dr. F. W. Carruthers (Little Rock): There is one point that comes to my mind on the question of etiology that I think is being overlooked in these patients, and that is the possibility of tubercular meningitis and syphilitic encephalitis. I have had the pleasure of following a few cases through which, on the autopsy, proved to be tubercular meningitis. They gave all the clinical symptoms of encephalethargica, and that is a mighty good term to use.

I certainly think that in the course of your diagnosis by elimination, you certainly have got to take those two conditions into consideration, and particularly tubercular meningitis. These cases will run a typical course that will simulate that condition, and, unless it is eliminated, you certainly are overlooking a factor that might be the cause for this condition.

Dr. C. C. Kirk (Little Rock): I didn't hear all of Dr. McRae's paper. The differential diagnosis between encephalitis and the catatonic stupor of dementia precox and infection exhaustion psychosis is not very easy to make. We have had cases sent to the hospital diagnosed as encephalitis that were not encephalitis. For instance, we had a case diagnosed as encephalitis that developed into a case of catatonic dementia precox of the stuporous type. This man remained in this stupor for about six months. At no time during that time did he come out of this stupor. There was no particular reason why the general practitioner should differentiate this from encephalitis lethargica. That is why I say some of the cases that are diagnosed as encephalitis, if they live long enough might prove to be the stuporous type of dementia precox. The infection exhaustion psychosis is another type that has to be differentiated. We usually expect to find either infection or prolonged exhaustion before the onset of the disease. If we don't get this history of infection or prolonged exhaustion, there is reason to suspect that we might have a case of encephalitis.

The main thing, in my opinion, to guard against in the treatment of encephalitis or infection exhaustion psychosis or the stuporous type of dementia precox is inadequate feeding. If the patients are stuporous and refuse food, of course, it necessitates tubal feeding. This should be instituted early. Don't wait until your patient is so exhausted that the food that he is given will be of little value. If you can take the case early enough, a great deal can be done toward keeping the patient's physical condition up to the place where he may be able to overcome the disease. The patients should have milk, eggs, sugar, and plenty of water. This should be given in small quantities and at frequent intervals. As Dr. Barlow said, the main thing is to keep up elimination and keep up feeding; that's about all you can do. There are no magic pills that I know of that are of any value in any one of these types of cases.

Dr. McRae (in response): I have nothing more to say. I am very glad for the discussion, especially that part that brought out some of the treatment, that I left out in my paper. I wouldn't have it assumed that I didn't do anything at all for my patient. I did everything that I could to keep him comfortable. He ate heartily until the last day, and drank water, and had as much supportive treatment as seemed to be necessary.

THE PREVENTION AND EARLY DIAGNOSIS OF PULMONARY TUBERCULOSIS.

O. M. Bourland, M. D., Van Buren.

After an experience of more than forty years, I am cognizant of the multitudinous, and frequently distracting duties of the general practitioner. The constantly increasing medical literature renders it well nigh impossible for him to keep abreast of the times. The recognition of this fact by the profession, I think affords justification for the suggestions herein made, which are offered in the nature of reminders.

The general practitioner realizing the great responsibility which he must necessarily assume in the prevention and early diagnosis of pulmonary tuberculosis, should give to this subject an increasing amount of thought commensurate with its known importance. Internships being very limited the great majority enter practice lacking in experience which is essential to correct diagnosis. Painstaking and oft-repeated examinations of suspects by all ordinary means, and the employment of the more modern means, notably the x-ray when available, will soon supply the necessary acumen. The acceptance of this admonition would redound astoundingly to health conservation.

That reminders are in order, we have it from those in charge of our State Sanatorium that patients arrive there in the third stage, whose family physician told them they were curable. Other tuberculosis subjects

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arrive there with a diagnosis of catarrh of the lungs, stomach, or head; others, diagnosed liver trouble. In others auscultation by placing the unaided ear outside the clothing, sufficed to make a diagnosis of tubercle-free if nothing was heard. Subjects arrive who have been diagnosed tubercle-free and advised not to go to the sanatorium, as they would contract tuberculosis if they should go there. Others were advised to go West, the physician seemingly not knowing of our own State Sanatorium. Recently a young lady, the daughter of a physician, came to me for diagnosis; stating that her father would not examine her. I found apical tuberculosis, and urged immediate sanatorium treatment. This she said, her father would oppose.

The human type of tubercle bacillus gains entrance through the mouth, or nose, being carried by dry sputum from unsanitary rooms, which have been occupied by the infected, without successful disinfection; or, from contact with an infected subject, as by kissing, or contact with vessels, towels, sheets, handkerchiefs, or other articles used by the infected. It may be swallowed in contaminated food. The Bovine type seldom causes tuberculosis of the lungs; but attacks the bones, joints and glands, causing at least eight per cent of all deaths from tuberculosis.

Infection from husband to wife and vice versa is of so frequent occurrence, that measures of prevention should be especially impressed upon these subjects. The human type has been found, but very rarely, in the thyroid glands, when operated for goitre; no other evidence of tuberculosis ever being manifested in these cases. The larynx, contrary to expectation, rarely if ever, is affected primarily. Why this resistance to infection by the gateway to the lungs exists, is a subject for speculation. The expectoration from infected foci lower down in the lung, exposing the larynx to frequently repeated showers of tubercle bacilli should explain the final lowered resistance, resulting in the laryngeal lesion.

Tubercle bacilli may remain inactive in the body many years hidden in the bronchial, or other glands awaiting the opportunity of invasion when from any cause, the defending forces are sufficiently weakened. Investigators have established the fact that practically all are infected in infancy or early childhood. The child in utero may be infected when the mother is in the advanced stage. Tuberculous nodes, in such cases, may be found in the cord. In postmortems for other causes, a large per cent show inactive tuberculosis, no clinical evidence of its presence having been noted.

Opposed to the ingress of the tubercle bacilli are the natural secretions which envelop them and mechanically aid in their expulsion. If these resources fail, then the processes of fibroid encapsulation and of calcareous degeneration may suffice to arrest the active tuberculous process.

Other infections, as the pneumococcus, streptococcus, etc., may co-exist and add materially to the gravity of the situation. Medical treatment in these cases may relieve this added danger; but has no specific effect on the tubercle bacilli. The tuberculous deposits or miliary tubercles, which are the resultant of inflammatory changes produced by the tubercle bacillus, are usually situated in the walls of the bronchioles and in the walls of the blood vessels; and when resistance is lowered the tuberculous process becomes active and the clinical picture develops.

The fact that of our population, about 30,000,000 can neither read nor write the English language, is sufficient to inspire deep concern; as we realize that "Education forms the mind; as the twig is bent the tree's inclined." That 29 per cent of the two and one-half millions of our young men examined for admission into the army were physically unfit; that 13 per cent of this number were unfit on account of active tuberculosis; that one-third of the infants born in this country never attain the age of five years, are sad facts that reflect on the intelligence and wisdom of our government.

Education should very materially correct this astounding condition of affairs. General education, and with it education along sanitary lines constitute the foundation for prevention of disease. To properly carry out preventive measures, our government should possess a national department of health, and at its head a physician in the President's cabinet. Such a department with a physician in the King's cabinet has been inaugurated in England, together with the visiting nurse. I believe the visiting nurse would probaly impress more people than the physician, the work of the nurse being possibly more understandable.

Disraeli said: "Public health is the foundation upon which rests the happiness of the people, and the welfare of the State. Reform directed to advancement of public health must take precedence of all others." It required a severe shock to cause England to heed this warning of its greater premier. Nothing less than the greatest war of all time, sufficed to impress our own beloved country with the fact that "Reform directed to advancement of public health must take precedence of all others." At least, let us hope that it is so impressed, as the medical profession now fully realizes this truth.

To show that special education is imperative in my country, I want to digress a moment to relate an incident of recent occurrence. A leading light in the legal profession had been elevated to the honorable and distinguished position of judge of our circuit court, many times receiving the coveted honor from his admiring constituents. A sworn exponent of the law, he nullified the sanitary law which established the individual drinking cup. This judge commanded the sheriff not to observe this law, and to place public drinking cups in the court room. The command was obeyed.

Another exemplification of assumed authority, the result of lack of knowledge, and possibly the increment of egoism, was the open hostility of a former county judge of my county, to a State law requiring medical inspection of schools for proper sanitation. He in his egoistic wisdom nullified a State act of law and constituting himself by his act an entire State Supreme Court, passed upon this protective law and called it unconstitutional; thereby cancelling the appointment of the State's appointee for my county. We must exercise charity in all such cases. I think as a matter of fact the medical profession is culpable. If it had been sufficiently impressed, this condition of affairs would not exist today. The medical profession should have seen to it, that during the childhood of these judges, the fundamental facts of sanitary science were common to every household.

Another observation spelling the necessity of education: In Washington, D. C., a physician stationed himself in the washroom of an eating house, and observed forty clerks of more than ordinary intelligence, who after using the toilet, only ten washed their hands before eating their lunch. Myriads of gonococci, spirochetes, tuberele bacilli, etc., may be conveyed from door knobs; and when we consider that these supposedly clean people are so ignorant or thoughtless, it would seem impossible to estimate the prodigious spread of disease which results from the millions whose environment and lack of education promote the dissemination of virulent germs.

Thomas A. Edison, has recently advanced the theory that the human organism is made up of minute units, so small that millions of them in an agglomerated mass would be indiscernible by the most powerful microscope, so inconceivably tiny that they may penetrate glass or solid steel; and, that they permeate every animate and inanimate thing, and that life eternal dwells in these minute atoms. Dr. Galippe, of the French Academy of Sciences, announces the discovery of micro-organisms imprisoned in amber, formed during the very early stages of the world's history. These micro-organisms manifest life and prove to be subject to culture, just as do the microbes and bacilli of today; and this probably after countless millions of years.

Post mortems show that tubercle bacilli, in cases of arrested development, have been hermetically sealed in cells by the white corpuscles. They are simply imprisoned, not destroyed. Why are these tubercle baeilli not destroyed? Possibly, we can never destroy all of these, and they may live eternally to appear in the human organism, as opportunity offers. Let us adopt the optimistic dictum of the immortal Pasteur that, "It is within the power of man to cause all parasitic (germ) diseases to disappear from the world."

Subjects of frequent attacks of cold, bronchitis, and pleuritis, in order to forestall the stealthy entrance of the tubercle bacillus, may be compelled to change climate where the necessary outdoor life and equable climate may be secured. The question of climate after years of investigation has been reduced practically to the question of outdoor life and fresh air, without much regard to dryness or humidity, to warmth or cold. But, of course, there is still plenty of opportunity for the exercise of wisdom in advice for specific cases, the characteristics of suspects being so varied.

In all subjects of substandard health, thorough examination should be insisted upon, with continuous observation, and the removal of diseased tonsils, bad teeth, treatment of pyorrhea, sinus disease, etc., as a necessary means of at least improving their powers of resistance; even, if no foci of tubercular in-

fection are found. Dr. Gautiez, a French physician, believing that Frenchmen will not take time and trouble to go through the courses of gymnastics usually prescribed, suggests walking on the ball of the foot. This brings into play muscles seldom used, all over the body, stiffens the spinal column and neck, favors deep breathing and improves the carriage and bearing. He says walking on the heels does not give much work to the muscles; and the abdominal muscles are relaxed. But the muscles are exercised when running for we are on our toes then. This causes deep expansion of the lungs, especially at the apices, which parts are little used; the neglect of exercise necessary to expansion, rendering them a fit nidus for the development of tubercle bacilli. The benefits accruing from such preventive measures, have been stressed of late, the results appearing miraculous in many cases, both in prevention and cure of disease. As a properly balanced diet is of paramount importance in the formation of antibodies, farm demonstrators should be tendered the encouragement and support of physicians.

Following measles, scarlatina, pneumonia, typhoid fever, smallpox, influenza, etc., the dangers of tubercular infection are much enhanced, especially in certain families, some observers being of the opinion that a predisposition may exist greater than can be accounted for by the lowered resisting power alone. In the progeny of the subjects of alcoholism and syphilis, close supervision is imperative. In the treatment of lues by the iodides, cases of unsuspected inactive tuberculosis may be converted into active cases by the absorption or breaking down of the protective barriers by the iodides, thus allowing the tubercle bacilli free circulation and possibly the formation of many active foci. The combination then, of these two active infections make a formidable foe. Not many years ago a diagnosis of incipient tuberculosis was rarely made, the symptoms and signs being unobserved until so marked, as to really place it in the category of the advanced stage. Subjects manifesting symptoms and signs of very limited involvement under ordinary means of examination, frequently, if not always, show by x-ray, a surprisingly increased area of infiltration. Subjects presenting symptoms of elevation of temperature, cough, emaciation and anemia were too often long neglected before sputum examination was instituted; and, possibly the occurrence of hemorrhage was necessary to impress the practitioner with the gravity of the situation.

Within the last few years the pendulum has swung to the opposite extreme, in some localities, the subjects of cough from colds, acute rhinitis, with a slight elevation of temperature, being diagnosed tuberculosis. Those affected with chronic maxillary sinusitis, chronic discharge from the ethmoidal cells, hypertrophied turbinated bones, atrophic rhinitis, adenoids, deflected nasal septum, etc., are diagnosed tuberculosis. Any of these conditions may produce cough which may be almost continuous, or recur every winter. But if referred to the specialist, these defects of the upper air passages may be cured and the cough stopped; the removal of a turbinated bone, hypertrophied adenoids or the curetting of an antrum, removing for once and all the phantom tuberculosis which may have existed for years. The cough resulting from these affections of the upper air passages is produced by extension of the infection from above into the pharynx, larynx, trachea, and bronchi as in ordinary colds. A persistent continuous fever, of endocrine origin which affects the sympathetic system may be encountered, and cause great anxiety to both subject and physician. Its persistence without other symptoms and signs, precludes the existence of tuberculosis.

There should be close co-operation with the throat and nose specialist and roentgenologist. Where from any cause, the system is substandard, especially where tuberculosis prevails in the suspect's family, the suspect should be kept under constant supervision, the temperature being watched for months remembering that a subnormal in the morning, before food and exercise may be unimportant; but an evening elevation is very important. Some cases may reverse the usual order, the rise occurring in the morning and remaining normal in the evening. The emaciation, with its concomitant so-called dyspepsia, and increased pulse rate is important; these manifestations, of course, being only indications of substandard health which may, or may not, be the resultant of tuberculosis.

Hemoptysis is also important, remembering, however, that this may result from a mitral stenosis, aneurism, or other conditions leading to stasis in the lungs. As the apices and inter-lobar spaces are usually first attacked, these parts should be percussed and auscultated frequently, as changes in these signs

vary from day to day. Immediately after coughing, deep breathing will often elicit rales unheard before. The positive sign, the presence of the tubercle bacillus may be delayed on account of absence of sputum. Unilateral wasting in the supra-scapular region may occur in incipient cases, and is a sign of great importance—before the rigidity of muscles of the chest, seen in advanced cases.

The tuberculin test as taught by Von Pirquet and that by Moro may be used without danger; the subcutaneous method being not without danger. As practically all adults respond to this test, demonstrating an infection at some time, it is of no importance except as a negative sign. It does not reveal an active condition when present. In infants and children a positive tuberculin test is of value as the infection may be arrested by means for increasing the growth of antibodies.

As so many suspects are found in which it is impossible to make a positive diagnosis, a provisional diagnosis may be made. This is preferable to a too optimistic attitude, as the immunizing treatment may be of immeasureable importance in preventing its later development if nonexistent, and if it does exist, may arrest the tubercular process.

DISCUSSION.

Dr. E. H. Hunt (Clarksville): This subject should not be neglected or slighted in the least. I want to thank the doctor for the paper. It is a fine paper, and covered the ground. I think that the main thing is to diagnose tuberculosis before the tubercle bacillus appears in the sputum, because then it has gone to where the tubercle has broken down and it has got into the stage where it can not be arrested so easily. I think that we do not know enough about the value of the x-ray in the treatment of tuberculosis. Just last week I had a doctor come to my office, and we x-rayed him and examined him carefully, and finally took him over to Booneville to have Dr. English and Dr. Stewart go over him. Dr. English says that since the commission has put an x-ray machine over at the sanatorium he is now satisfied that they are getting more favorable reactions in patients with tuberculosis of the glands of the mediastinum than they have heretofore. This doctor is going over there now this week. And, they have wonderful hopes of completely arresting his case, and perhaps curing him. We should make the x-ray machine more accessible to our offices.

Another thing, I think that we are slighting the sanatorium over at Booneville. If any one of you have never been over there, you would be agreeably surprised to see what the State has over there. It is a wonderful institution. As Dr. Stewart very aptly says, the men around the State know the superintendent; but they don't know the man who is doing the work. That is, Dr. English. That fellow English is a wizard, and he is doing some phenomenal work over there. I was talking to him Sunday, and they would be very glad to put on a clinic there for any of the members that will come over there and visit them, and they will be glad to feed you. It is an interesting clinic. For instance, they have a young girl over there, now eight years old, with a typical cracked pot sound in the lung, and they have not had a typical "cracked pot" sound in the sanatorium in over two years until this one came. We read about those cracked pot signs; but we, as a matter of fact, don't hear them very often.

We want to study tuberculosis more, and learn to diagnose it earlier with the x-ray. Personally, I have learned more in the last two or three years by going over to the Booneville Sanatorium with those fellows and studying their cases and listening to them, and examining them, than I ever knew before. It is a marvelous clinic, and I would like to insist that we work up clinics and attend that sanatorium and watch the technic over there. (Applause.)

Dr. S. C. Grant (Mulberry): As Dr. Hunt has said, we should recognize tuberculosis early, it is almost criminal to neglect making a thorough examination in suspected cases. Some of the early signs are overlooked, such as conjunctivitis and blepharitis with dilated pupil, on the affected side you have have atrophy of the mammary gland with increased pigmentation of the nipple. Temperatures which can not be traced to any particular cause should create suspicion, in children with enlarged cervical glands probably show that infection entering through the tonsil has invaded the next fortress of protection; namely, the cervical glands, you will then have a cervical tuberculosis.

Dr. Hunt spoke of the work done at Booneville, if you haven't visited the sanatorium it is well worth your time.

Dr. Thos. Douglass (Ozark): Dr. Bourland's paper is very interesting. I regard the paper one on a subject of the very gravest importance. It certainly does cover the ground very thoroughly. We might spend a week very profitably discussing this subject, and then we wouldn't exhaust it. It seems to me that there is little excuse at the present time for overlooking cases of tuberculosis, and allowing them to go along neglected; that is, when they come to our attention. It is still too often the case that they don't come to us until they are already advanced. We fully realize the importance of paying attention to the respiratory diseases; particularly, common colds. If we look after these cases carefully, no doubt we will often prevent the development of tuberculosis. If one plays safe as regards any case which shows loss of weight and daily temperature until the condition is cleared up, he will be in little danger of neglecting a case of tuberculosis. The truth is, however, that the public in general needs to be instructed on the subject. People ought to be taught to go to the physician whenever there is what they think a mild disorder, and we should never be guilty of what amounts to criminal neglect in failing to thoroughly investigate those cases. They should be looked after until there is absolutely no question about the absence of tuberculosis.

Dr. Hunt says that physicians over the State neglect the sanatorium. Now, we fully realize that the sanatorium can't take care of more than 10 per cent of the cases of tuberculosis in the State of Arkansas, and it is not intended that the sanatorium should do so. Of course, we realize also that there ought to be a hospital for taking care of the hopeless cases of the advanced cases that are no longer curable. I think that mistakes are often made, regarding as incurable advanced cases that are actually curable. Many a patient has had hemorrhages, and yet gotten well.

With regard to sending them West, as is often done, I think that is one way in which the physician

shifts responsibility. I don't often send patients on a long journey. The incipient case can get well at home as well as he can anywhere else on earth. Arkansas is a very good place for tubercular patients to get well. The advanced cases should not be sent West unless you want to confirm the fatal results. They are more likely to get well at home than if they took a long, tiresome railroad trip. I think too often the railroad trip is the last straw that finishes the patient, and they die after they get to the end of their journey, after a shorter or longer period. I think we ought to pay more attention to the careful treatment of these patients at home. And, there is not a physician in the State of Arkansas, who is at all competent, that can not take care of these patients, and get a large number of them well at home. The care and rational treatment, is not so abstruse, but that the average physician, studying the case and the conditions thoroughly, may be able to accomplish, if not a cure, at least an arrest of the process, in a large number of cases. I think a great deal more can be done in this direction than has been done. The disease is widespread, and apparently it is increasing, and we can, by proper attention to these cases, prevent this distress, and we can restore to normal health a large number of people. A lot of people come to us whose financial condition utterly prevents their taking a journey westward, and they are better treated at home. They can be better taken care of at home. The main thing is to impress upon them the absolute necessity of a thorough-going fight against the disease.

Dr. D. C. Walt (Little Rock): I regret that I did not hear all of the essayist's paper. I think it is rather strange that, as it has been recognized, that children contract tuberculosis in their infancy, we as doctors would allow a single child to go without caring for it each day through instructions to the one who had care of the child.

Dr. Hunt: Perhaps I was misunderstood. I didn't intend to say that the x-ray will show active lesions. It will show enlarged glands, and enlarged glands can be due to tuberculosis or past pneumonia or influenza. But with your physicial findings, if you get that enlarged gland, the mediastinal glands, then with that peculiar click through the stethoscope, and this range of the temperature, I say that it makes your diagnosis easier. I don't mean to be understood as diagnosing an active tuberculosis from a non-active tuberculosis with the x-ray.

Dr. H. Moulton (Fort Smith): I have been struck in late years with the number of people who think that tuberculosis begins in the throat. Of course, we all know better, but the people themselves, many of them, don't know anything about it. I will illustrate by saying that patients now and then come to me, and ask me to examine their throats. Well, I ask them what the trouble is. "I cough a little; I think there might be something the matter with my throat." I examine the throat, and I will say to the patient, "I don't see any trouble in your throat." Well, she says—and she usually is a woman—"I am glad, doctor, because I was afraid I had something very bad the matter with me." "What are you afraid of?" "Tuberculosis." I say, "You may have tuberculosis, but there is no sign of it in your throat." Then, it becomes my duty to advise them to return to their family doctor, or some other competent person, for a thorough investigation. At least, if they give any evidence of being ill, I impress that on their mind very strongly. Most of them seem to think, or a great many of them seem to think, that if the throat is all right, that settles it; that we ought to be able to see, by looking in the throat, whether they have tuberculosis or not. I presume every throat specialist has the same experience. The man who is a nose and throat specialist has a good deal of responsibility resting upon him right there, because he might be misled sometimes into encouraging the patient, who is beginning to be ill with tuberculosis, to think that he is well.

Dr. S. J. Wolfermann (Fort Smith): I wish to compliment the doctor upon his paper and further emphasize what Dr. Hunt has already stated, that you must make the diagnosis before the tubercle bacillus appears in the sputum. If you do not do this, some one has slipped. I have slipped and I suppose the rest of you have also. However, there are a few things that are confused with the early diagnosis of tuberculosis and as the diagnosis is one of exclusiou, these must be ruled out before any conclusion is reached. One of these which I wish to mention at this time is mild hyperthyroidism. The Goetz test is valuable help here. I have frequently seen cases referred as tuberculous that were hyperthyroids. They are anemic, they have a fast pulse, and frequently au afternoon temperature or a temperature upon exertion. You may find a few rales, but they are not persistent and localized, and persistency and localization are two very important characteristics of tuberculosis rales.

Now in regard to the x-ray pictures. I do not believe you can make a diagnosis of activity from a picture, but the fluoroscope will show "lighting" defects in the apices. The two after your physical and clinical history help clinch the diagnosis.

I do not wish to get into any argument about tuberculin. Before this Society iu Little Rock in 1915, I presented a paper trying to show the differences in the dinerent tuberculin reactions. Their reliability has been shown by Pottenger, Fishberg and others, and many men feel that they can differentiate between the reactions giveu by active and non-active cases. A tuberculin reaction by itself can not make a diagnosis, but in conjunction with the clinical history, physical findings, temperature record and x-ray, an early diagnosis can *certainly be made.*

In regard to prevention, there are many men who believe most tuberculosis is primarily a glandular affair the majority of which is contracted in childhood, and later iu life becomes active. If this be true, certainly the first place to try to prevent tuberculosis is in the schools. The State Tuberculosis Association has undertaken this work and in several counties there are either visiting nurses or paid workers who are teaching this prevention to the children. Sebastian County is fortunate in having one of these workers and those of you who live iu counties where this work is not being carried on, can do much for your community by seeing that such education is given to your children and that each and every county of the State has an organized County Anti-Tuberculosis Association under the jurisdiction of the State Association.

Dr. Bourland (in response): The object of the paper was, if possible, to get some to look into the cases a little more thoroughly. I know that a great many of our older men may have gotten into the habit of looking at them rather superficially. I have supplemented my reading and observations of late by the use of the x-ray; and examinations by the x-ray have stimulated me to do better work, and to give all cases a thorough examination.

MEDICAL ETHICS.*

J. H. Phipps, M. D., Roe.

As the people become better educated they become more ethical. As the doctor becomes better educated, the more he honors his profession, and he adheres closer to medical ethics. If we are strictly ethical to our professional brother, the laity thinks more of us; for they know that if we deal dishonestly with each other, we will deal dishonestly with them too. They know that if we are non-ethical, we are to some extent, ignorant as well, and are not as competent and as moral as a model physician should be; that is, the more intelligent class of people know it. However, we have a great many people who do not know what medical ethics is, nor do they know competence from incompetence, and they make good prey for the charlatan. We have people that glory in getting up a controversy between doctors, with the hopes of causing them to split fees, and occasionally they succeed. We should not be so weak that we should yield to a thing like this, but we should honor and dignify our profession, for it is a worthy cause. We have no right to expose a man for making a mistake, if he is doing his best, as we all make mistakes sometimes, and it is perfectly natural for some men to be endowed by nature with more ability than others; but if we are without good morals, we are without excuse and not worthy of being called a doctor of medicine.

It is not my intention to try to teach this body of physicians medical ethics, for I am sure that many of you know more about the theory and teachings of ethics than I do, but I want to call your attention to the littleness of non-ethics, and the beauty of ethics. The ethical man advances the cause of medicine, and the non-ethical man hinders the cause of medicine by his hypocrisy and slanderous tongue. He had no ambition to dignify the medical profession, or build up the morals of his country, but he only seeks to satisfy his personal greed.

It is disgusting to see how some doctors advertise. They do not advertise in the papers directly, but they have the editor of some country paper to make mention of their being called in consultation to see some prominent person, or of doing some great operation that was very successful. The laity does not understand this as advertising, but the medical profession does. I remember calling a doctor to help me do an amputation of an arm, and in a few days seeing an account of it in the county paper. Something like this: Dr. A. was called to do an amputation a certain number of miles out in the country, and in a certain number of minutes he had reached the place,and in a certain number of minutes the amputation was done, and in a certain number of minutes he was in town and in his office. We all know that Dr. A reported this to the county paper, which was a sly way of advertising. We hear and know of so many doctors that tell their patients that if they had been one hour later about calling them there would have been no use of calling them at all, and that it took skillful work for him to save them. Or that if he had continued to take the other doctor's medicine a day longer he would have been a dead man. In some cases our patient becomes dissatisfied and calls another doctor during our absence, and we know nothing of it until we return to find our patient on another treatment, or perhaps in some cases they notify us over the phone that we need not come any more, as they have called another doctor. In some cases our consultant hangs around until we leave, and has a confidential talk with the patient's relatives.

A number of years ago I was treating an old lady for colitis, and the old lady grew from bad to worse all the time. I asked for consultation, but her husband seemed to think there was no need of another doctor being called, as he felt that I was doing all that could be done for her. But a few days later her relatives called to see her, and they though best to call another doctor, and made a selection and asked me to call him. I called him to meet me that afternoon, but on my way back I was notified that my patient was dead, and I returned home, but my intended consultant arrived after the lady had died. He went in and examined her very carefully and told her husband and relatives that there was no need of her dying, and that if he could have seen her twenty-four hours sooner he could have saved her. This family believed that he was honest and knew what he

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

was talking about. I remember treating a case of vomiting of pregnancy, and giving cerium oxalate with laxatives; but the woman continued to vomit. She called another doctor, and he pronounced her case a serious one. He told her that the medicine that she was taking was killing her, and that he would have to do skillful work to save her, but that if he could have seen her in the beginning he could have checked it at once. In another instance I was treating a case of infection, due to an abortion, and called for consultation. The father readily responded, and called one of those self-conceited, unethical and gorgeously dressed doctors that "always gets his patients up, if he is called in time." However, he agreed that the treatment that I had her on was as good as he could give. But he was so anxious about this patient that he called during my absence the next day, and called the father to one side and asked him about my method of giving antistreptococcus serum. He said that the serum treatment was good, but if not administered just right it was extremely dangerous. I gave a dose intravencously that caused some reaction, and he told the father that it should not have been given that way, and that if I had given just a little larger dose it would have killed her.

These are just a few of many such instances that we all know of. The charlatan hears of every death that occurs anywhere near him, and wonders why the doctors lose so many paients. He tells the people about his great success, and his remedies and cures for ailments that the other doctors are losing through ignorance. Such men are a disgrace to the medical profession. I consider the charlatan or non-ethical man worse than a thief. In reality he is a thief. He will steal and tear down the reputation of his professional brother, and lie to defraud his clients.

Gentlemen, let's honor and dignify our profession by doing a clean and honorable practice, and the laity will think more of us, and we will think more of each other.

COMING MEETINGS:

ARKANSAS MEDICAL SOCIETY—May 17, 18, 19, Little Rock, Arkansas.

AMERICAN MEDICAL ASSOCIATION — May 22-26, St. Louis, Mo.

"DISEASES OF THE ACCESSORY SINUSES OF THE NOSE.*"

R. H. T. Mann, M. D., Texarkana.

There have been great advances made in the diagnosis, treatment and operations upon the accessory sinuses of the nose. Within the last few years many things have been learned about sinus diseases, which were unknown a few years ago. With the means at hand, an accurate diagnosis can be made now in almost every case. Since we have these improved diagnostic methods, sinus diseases have been found to be of a far more frequent occurrence than had been previously suspected.

To be sure there is more or less involvement of some of the sinuses in nearly every case of acute colds. Where drainage is free and no obstructions in the nose exist, these cases usually recover with the recovery of the cold.

All patients suffering with a chronic discharge from the nose, with or without an offensive odor, should have a thorough examination made of the sinuses to see whether or not some of them are not involved. In chronic inflammations usually disease will be found somewhere in some of the sinuses, which can be relieved by a suitable operation.

The examination should consist first of an examination of the nose itself. In this examination should also be included a thorough examination of the teeth; because an abscess at the root of certain of the upper teeth often perforates into the maxillary sinus, and this is one of the more frequent causes of maxillary sinus disease.

Transillumination is our next step in diagnosis. The next and probably the most valuable adjunct in the diagnosis is the x-ray, because here we get a picture of the sinuses, and can have an accurate comparison of them from the x-ray plate. It happens more frequently than we suspect that the entire chain of sinuses on the same side are involved.

Treatment.

Of these cases which come under our observation, if free drainage can be established through the nose, very many of them can be cured by this method alone. Drainage from the accessory sinuses of the nose is not without

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

danger, especially so if the operator is one whose experience is very limited. Many deaths have occurred all over the country from meningitis following operations upon the frontal sinus, which were performed by operators whose experience was very limited. The external operation is much safer, unless a man is thoroughly familiar with the parts upon which he is to operate and has had considerable experience; because when entering the frontal sinus in external operations, the operator works away from it down into the nose, and there is no danger of breaking through and injuring the brain, as you are working away from the brain at all times. While, on the other hand, when going up into the sinus through the nose, you are working in the direction of the brain at all times, and often it is impossible to see distinctly what is being done because of the bleeding.

The maxillary sinus can be drained through the nose. The ethmoids, of course, can be cleaned out where this is necessary. In an operation upon the sphenoid, breaking down the anterior wall of the sphenoid will usually suffice, allowing more drainage.

In chronic diseases of the frontal and maxillary sinuses where pathological changes exist in the mucous membrane of the sinuses themselves, a drainage operation will not perfect a cure. In these cases some one of the radical operations will have to be performed where a thorough inspection can be made of the entire sinus, and all of the diseased tissue removed before a cure is to be expected.

The chief trouble about all radical operations upon the frontal sinus is the danger of deformity existing, which, in some cases, is very great. Many radical operations have been devised on the frontal sinus by various operators. I personally prefer the radical operation of Killian, or some modification of it; because, in my hands, it leaves little or no deformity. It allows a thorough inspection of the entire sinus, giving easy access for the removal of all diseased tissue, and while many deaths have been reported from an operataion on the frontal sinus, in well selected cases the mortality should not exceed one or two per cent.

I only want to impress upon you the fact that in every case of chronic diseases of the nose, a thorough examination should be made of the sinuses; because very many of these cases can be cured by suitable surgical procedure. If I have been successful in doing this, then I feel like this paper will have served a useful purpose.

DISCUSSION.

Dr. Robt. Caldwell (Little Rock): Sinus surgery is something that is very interesting to me. Since the x-ray has been more used, we have found, as the doctor said, more sinus trouble than we used to. I believe that the x-ray has failed us on sphenoid sinus trouble. The x-ray can not be absolutely depended upon in maxillary sinus infection. The final test, in my diagnosis of maxillary sinus infection, is to introduce a trocar into the maxillary sinus by going through the nasal wall underneath the inferior turbinate body and wash it out, and see if there is pus in the sinus. There is no question in my mind but that drainage is the sine qua non in sinus infection.

In regard to the ethmoid sinuses, I curet just as few ethmoid sinuses as I can. When you come to think of the anatomy of the ethmoid cells, and how absolutely impossible it is to get up in there and clear out everything all around and leave it in such a condition that healthy mucous membrane will cover over all that area, you begin to wonder if you would like to have these ethmoid cells cureted very much in your own nose. I am sure I wouldn't.

In regard to the sphenoid sinus, I do very little surgery other than irrigate. I frequently irrigate the sphenoid sinus. I treat it more by irrigation than by surgery. I have operated on a few cases, but my results have not been flattering.

Now in regard to the frontal sinuses, I would hesitate a long time before I would let a man do a real radical operation on my frontal sinus and take out the whole anterior wall. The doctor says he does a modified Killiau operation. You know the old Killian operation takes away the whole anterior wall. When you do a radical operation upon a frontal sinus, you have a hole almost as large as an egg in most of the cases, and a great many people object to that. So, in the last three years, with all my frontal sinuses, I have been going in right through the hair-line, and beginning my incision down about half an inch below the eye-brow, making my incision practically the same as in the Killian operatiou. I have taken away a piece of bone about the size of a nickel to a quarter. I leave the mucous membrane in the sinus alone just as much as I possibly can. I have taken a curved file made for the purpose, and gone down into the nose, opened the sinus anteriorly until I could introduce from below one of those Ingall's gold tubes, and spread it out above, then completely close the wound. I have three patients that have been wearing this tube now for over two years. Before this operation each one of them would have an exacerbation of pain on an average of once a month, that would last about a week. Neither one of them has had any pain since they have been wearing the tubes. It is not original with me at all. It is Ingall's method, only he introduced the tube from the nose. I have seen him introduce them from the nose without an external operation, but it takes a man of more nerve than I have to introduce one of those through the nose, because it is a pretty dangerous place to work.

I enjoyed the paper very much, and I think we are going to pay more attention to sinus trouble and find more sinus trouble the more we hunt for it.

Dr. John L. Jelks (Memphis): I never went into a frontal sinus in my life. But, my friend, the essayist, unwittingly came near destroying one of the most important points in the paper, viz.: the importance of these sinuses from a focal infection standpoint.

Apropos, a lady visited me from a nearby city, who was running a temperature, who had been a subject

of neuritis and rheumatism, and was supposed by some to have tuberculosis. I assured her that, in my opinion, having made a blood count and various examinations, that her trouble at least had its origin in a focal infection. She was sent to a throat man, and to a dentist. X-rays were taken, and two bad teeth with pulp abscesses, were found and those teeth extracted. The tonsils seemed to be all right. No sinuses were discovered to be diseased at the time. I drained surgically her gall bladder, which needed drainage. I didn't believe it needed removal. I removed a diseased appendix, which I believed to have its diseased origin in this focal infection. The temperature which she had been running, the afternoon temperature rising for months, came down to normal, strange as it might appear, for the history later doesn't bear out the probability that it should have done so. She improved in weight and in general health. Finally, after a while her temperatures again began rising, her health again began to fail. Then it was that she returned to Memphis, and to another nose and throat man, and he discovered frontal sinus infection. He drained these sinuses, and found considerable pus in these sinuses. It was there, gentlement, that she had her focal infection undoubtedly. I say, therefore, the doctor unwittingly, in his remarks, was about to make light of an important point in his paper, viz.: the importance of these sinuses as a point of focal infection. (Applause.)

Dr. H. Moulton (Fort Smith): I want to thank Dr. Mann for his paper. The things that are very much worth considering always are the sinuses connected with the nose; not only for the bad effects they have locally, or the bad effects they have on the general health, but also for the bad effects they have upon the eye-sight.

I don't believe in blindly exploring these sinuses surgically, unless we have some manifest evidence of disease of the sinuses. A short time ago it was the fashion among a few to open these accessory sinuses, searching for concealed suppuration, when there was no evidence, by the speculum introduced into the nose, or by transillumination or by the x-rays of any disease existing; merely the presence of some constitutional disturbance or some disturbance of the eye-sight or persistent headache that could not otherwise be accounted for.

Exploratory operations in this region were not advocated by the author of this paper, and I merely allude to this because they have been and are advocated by some very prominent men; operations that we might call exploratory. They should not be done because of the extreme danger of theso operations. Dr. Allport told me that in Chicago one enthusiast on this operation had been excluded from every hospital in Chicago, because of his recklessness in making these exploratory sinus operations. It is a dangerous region to fool with; not only inexperienced operators, but the most experienced will have fatalities following these operations sometimes. Fortunately, fatalities have not attended any of my operations. I have been lucky. I open the frontal sinus, and drain a good many times, and the maxillary and the ethmoid, and even the sphenoid.

In regard to the suggestion of Dr. Caldwell about putting in a gold tube in the nose after having opened a frontal sinus externally; that might be necessary and advisable in some cases, but so far I haven't found it necessary. I have made it a point, after opening a frontal sinus externally, to remove enough of the floor of the sinus and the ethmoid cells, so that drainage remains permanent in the nose, without the introduction of drainage tubes.

Dr. Wm. Breathwit (Pine Bluff): Sometime last fall a very prominent man popularized a word, and called it "normalcy." Some of you gentlemen here may have sustained that man in his political contentions. Apropos of normalcy, I want to say that anatomically the word "normalcy" applies with reference to sinus disease quite as frequently as a causative factor or rather as a predisposing factor, than almost any other condition.

The experience of the essayist and of those men who have discussed this paper, and, I am confident, the experiences of the gentlemen in this audience will bear me out in the statement that those of you who do a great deal of work in the black belt of Arkansas, very rarely find sinus infection in the negro race. It seems to me that modern civilization brings its penalties as well as its advantages. Now, I believe Dr. Mann and the other men who are doing special work will bear me out in saying that at least 75 per cent of their sinus diseases are found in patients whose nasal apertures are away from what he would regard as normal. There is either an over-growth of the anterior end of middle turbinate or a lateral or bilateral or double lateral deviation of the septum. And, these anatomical relations have a very large bearing as a predisposing factor, preventing drainage of the sinus, incident to coryza and other nasal infections, impeding normal respiration.

I want to thank Dr. Mann for his paper. It is a paper inviting discussion, and discussion is very frequently enlightening, in that it brings out the majority of opinions. A majority or consensus of opinion usually gives us a line of procedure upon which to base conclusions looking to a remedy. Now, unfortunately, the medical profession is not agreed on any one thing that I ever heard of, except perhaps with reference to the possible causes of some few diseases, meaning that the type of operation is a personal equation.

I want to leave this thought with you, too, that practically every man who is doing any type of surgery of a successful nature stamps that surgery with his personality. It is his modificaton of somebody's suggestion or somebody's selection of an operation. Dr. Mann tells you that he prefers the Killian operation. Dr. Caldwell doesn't like that. If I were to give my preference, I would tell you that I like the Caldwell-Lue operation for frontal sinuses above all others combined, in that it is a simplified operation; it gives you some of the advantages of the balance of them, minus any of the mutilation. It appeals to me and I prefer it. I am not going to try to convince Dr. Mann that the Caldwell-Lue is right instead of Killian. That would be very foolish indeed, because the one appeals to him and the other appeals to me.

With reference to focal infection, it has not been my observation that the facial sinuses are as frequently a source of systemic or focal infection as are the tonsils and the teeth. Now, that may be a personal equation, or a personal observation. I don't know whether the men doing the work are going to bear me out or not. My observations and my experience has been that the teeth and tonsils are more frequently the source of systemic infection from a focal standpoint than are the facial sinuses.

Dr. Mann, in response: I am sure that if my friend, Dr. Jelks, had not missed several meetings of the Arkansas Medical Society, he would not have felt it necessary to emphasize the point of focal infection, because I, and I am sure every man in this society, has had drilled into him in the last few years this idea of focal infection. I am glad that Dr. Jelks mentioned it again.

Dr. Breathwit is exactly right about the drainage of the nose not being free as the cause of a great

many of these conditions. In fact, nearly all of them are, except where a perforation takes place into the maxillary sinus from the root of an infected tooth. I think if you are in doubt as to diagnosis, that you can wash out the maxillary sinus, either by perforation through the nasal wall into the sinus, or if you are very dextrous through the natural opening of the sinus into the nose.

There are just two points in medicine to be considered, one is diaguosis, the other treatment. The treatment consists in curing the patient if it can be done. No operation or treatment should stop short of a cure if a cure is possible. In regard to radical frontal sinus operations, wish to state that many patients prefer having a little deformity with a cure, rather than have an operation without a cure with no deformity; although as a rule there are many radical frontal sinus operations performed whereby a cure has been obtained and there is no deformity whatever apparent.

I have some lantern slides in my possession of various patients on whom I did a radical frontal sinus operation, and who have had no further trouble since the operation.

Any drainage tube of any kind which is left in the nose permanently always causes more or less irritation, and therefore they should not be worn if it is possible to avoid them. I wish to thank you very much. (Applause.)

THE UTRICLE IN CHRONIC URETHRITIS.*

T. N. Black, M. D., Hot Springs.

A review of the recent literature and text books on urology reveals the fact that very little attention has been given to the utricle, and utrieulitis as a definite condition has been almost totally ignored. Luys and Geraghty were probably the first to reeognize this little organ as a source of chronic infection. Luys gives considerable attention to the verumontanum, particularly calling attention to the frequeney of vegetation on this little organ due to chronie inflammation, which may be non-gonorrheal. Koll mentions it as a possible cause of non-gonorrheal urethritis or "unrethrorea" and advises injections of silver nitrate with a Geraghty syringe. Referring to a condition of this sort, Keyes says that "the only cure is eommon sense; the only relief, matrimony;" but it is my opinion he had in mind that type of "urethrorea" due to masturbation and undue sexual exeitement rather than to a post-gonorrheal condition. Barringer, in Cabot's "Modern Urology," gives practieally no attention to the utricle as a definite cause of persistent urethral discharge.

It has been my experience to meet with case after case of "ehronic gonorrhea;" patients who have become confirmed neurasthenics from constantly seeing the oecasional urethral discharge. They have been the rounds from doctor to doctor and very often to the charlatan, receiving no benefit. Microscopieally the discharge seldom reveals the presenee of the gonococcus. This fact led Koll to classify this particular condition as a non-gonorrheal urethritis. In a true sense, it is non-gonorrheal; but the vast majority of my cases follow aeute gonorrhea and no amount of explanation can convince them that they are not suffering from "clap." Questioning these patients concerning previous treatment almost invariably reveals the faet that they have had weeks, and often months, of treatment consisting of irrigations, sounds, prostatic massages and injections. It is seldom that one has ever had urethroseopie treatment. Recently a man eame to me for treatment and the first thing he said was: "Doctor, I have had hundreds of irrigations and sounds. Please do something else." My exploration revealed a swollen verumontanum and upon inserting a cannula into the utricle pus was obtained. A course of utricular lavages completely stopped the discharge which had existed for more than a year. Others eome who have had fairly scientific treatment, including the Belfield operation and topical application of silver to "spots" in the urethra; but still complain of a discharge. In numbers of these I have found the infected utricle to be the sole source of the disease.

The utricle is situated in the posterior urethra with its mouth opening in the verumontanum at its anterior surface. Its average length is 5 mm. and at times it may become greatly enlarged so as to engage the tip of a sound. It courses through the verumontanum and then blindly ends in the substance of the prostate.

The most comprehensive anatomieal study was done by Tyrina, who says: "It is developed from the lowermost ends of the Mullerian ducts and is therefore analogous to the female uterus and vagina on which account it has been called the 'uterus masculinis.' Our studies show that the utricle, or 'sinus pocularis,' is a long eanal lined by many layers of squamous epithelia and by serial seetions we have been able to demonstrate that it ends by a complicated system of invagination processes. They are also lined by the same type of epithelia and suggest glandular organs; but are probably only se-

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

creting surfaces. It is easy to see how favorable this structure is for retention products, and suggests difficulty in eradicating infection. Indeed, we believe that researches will show that the sinus pocularis (utricle) is often the most important factor in keeping up infection in the verumontanum and that the surface appearance of the latter indicates the pathologic condition in the utricle below, as an ulcerated ureter mouth reflects kidney tuberculosis above."

The comparison above is true of a utriculitis, but the statement should be modified to include a spermato-cystitis. In infection of the seminal vesicles when the pus is continually pouring out through the ejaculatory ducts onto the verumontanum, it is a well known fact that this organ will present identically the same pathological picture. Indeed, this fact led Luys to say that "the verumontanum is the mirror of the seminal visicles." It is therefore necessary that we carefully exclude an infection of the seminal vesicles, before depending upon utricular lavage for a cure.

Diagnosis.

This depends upon finding pus in the utricle by aspiration. After a thorough urethro-vesicle irrigation with warm boric acid solution the posterior urethroscope is inserted so that the verumontanum rests in the opening. The utricular mouth is easily found providing the verumontanum is not disarranged by polypoid growths or by previous injurious instrumentation. In this case local treatments must be instituted until the surface has become rounded and smooth. Very often by tilting the urethroscope upward causing pressure on the verumontanum, pus may be seen exuding from the utricle. If it does not, a cannula is inserted and a small amount of the fluid removed by aspiration. I make use of a long cannula fitted to a Luer syringe, though Kollman's pipette may be used just as well. The fluid obtained is sent to the laboratory for diagnosis.

It is well to bear in mind all the possible causes of a chronic urethritis and investigate thoroughly so as to overlook nothing in the course of treatment. Among the most important causes are prostatitis and seminal vesieulitis. The prostate should be massaged, carefully avoiding the seminal vesicles, and laboratory study of the secretion made. This is followed by a boric acid irrigation and then the seminal vesicles are stripped and the secretion examined. This procedure should definitely determine whether or not these organs are affected.

Stricture, in any form, though not sufficiently developed to cause obstruction, is often the cause of a persistent discharge. Infection of the glands of Cowper and Littre and a granular condition of the mucous membrane of the urethra are other important causes.

Treatment.

This is simple and effective when properly carried out. Unless the technic is perfect one is apt to injure the urethral mucosa with the urethroscope and make matters worse rather than better. It is the technic upon which I wish to lay stress.

First, it is most important to remember that instrumentation should never be resorted to in an acute urethritis, anterior or posterior; wait until it has reached the chronic stage. Ninety per cent of my cases are chronic when I see them and the examination can be made at once.

The proper selection of the instrument is imperative. Determine the size of the entire urethral canal and select the proper size urethroscope accordingly. It is well to have at least three sizes, 20, 22 and 24, French; and in treatments use the largest size compatible with the urethra. The larger size gives a better view of the verumontanum and makes application of treatment easier. The Swinburne posterior urethroscope is most applicable for utricular lavage and when properly inserted can do no harm to the urethral structures.

Nothing is more important than the proper introduction of the selected instrument. Anesthesia is unnecessary. If the urethra is too sensitive for urethroscopic treatment it should be toughened by urethro-vesicle irrigations and proper sounding before the urethroscope is used. After the patient has emptied the bladder, having always a full head of urine, the urethra should be irrigated with a warm boric acid solution before proceeding. The patient is then placed upon the table in the same position as for cystoscopy and the well lubricated urethroscope inserted. This should be done gently, following all the curves of the urethra properly, and passed backward just far enough to place the veru into the urethroscopic opening. After one has had experience it is easy to place the instrument in the proper place without having to look

and run the danger of scraping the veru with the sharp edge of the opening. When the obdurator is removed the scope should be held perfectly steady to avoid trauma. If, upon examination, the veru is not in the opening, the obdurator should be replaced gently and the scope pushed forward or backward, as the case may be, until it is found that the veru is visible. I wish to stress the point that the instrument should not be moved unless the obdurator is in situ. The sharp edge of the opening may engage the anterior or posterior borders of the verumontanum and do more damage than the treatment does good. It is here where success lies in urethroscopic treatments. Air pressure dilatation may very often be advantageously used, lessening the danger of trauma.

The medicinal agents used for utricular lavage may be varied, but I make use of nitrate of silver entirely. The strengths vary from one to five per cent. The Luer syringe is filled with solution, attached to the long cannula and the injection made directly into the utricle. From one to two cc. are injected which promptly fills the lumen of the scope. It is drawn off with a suction bulb, the obdurator is replaced and the instrument removed. These treatments should be repeated twice weekly until the infection is cleared up.

The following illustrates one of my earlier cases:

A. S., male, thirty-five years of age; single; personal history not out of the ordinary; had gonorrhea four years previous to examination. History of recurrent attacks of acute gonorrhea which would dry up quickly except for a persistent, white, sticky morning drop. His treatments consisted of prostatic massages, irrigations, sounds, instillations and injections while under the care of a reputable physician over long periods of time. His complaint to me was "the morning drop, shreds in the urine, and an uncomfortable feeling in the rectum especially at the end of urination."

At this time I was paying very little attention to the utricle, and completely overlooked it making a diagnosis of spermato-cystitis with its resultant chronic urethritis. This diagnosis was, as far as it went, absolutely correct because the secretion stripped from the seminal vesicles revealed much pus, spermatozoa, staphylococci and streptococci. Gonococci could not be found, though probably special cultural methods would have demonstrated them.

The patient was taken to the hospital and under local anesthesia the vasa deferentia were exposed and ten cubic centimeters of a twenty-five per cent argyrol were injected into each seminal vesicle. He was kept in bed four days and required to use the bed pan so as to retain the argyrol as long as possible. After this, usual urethral treatment was resorted to for a period of four weeks without clearing up the morning drop, the uncomfortable feeling in the rectum upon urination had disappeared, and the secretion stripped from the seminal vesicles no longer contained pus or organisms. Urethroscopic examination revealed a swollen, reddened verumontanum and during the examination pus was seen to appear from the utricle. I immediately began utricular lavages with two per cent nitrate of silver twice weekly and at the end of the second week he was unable to milk up the morning drop. He remained under my observation two weeks longer and at no time did he see a discharge and the urine had cleared up perfectly.

I saw this patient six months later and he had remained perfectly well. Since that time I never fail to investigate the utricle and my percentage of cures has been increased.

THE TREATMENT OF SMALLPOX IN ITS LAST STAGE.*

R. L. Fraser, M. D., McCrory.

In order for you to understand my ideas well, I shall explain a simple thing to you, relative to my general position as an M. D.

I am a general practitioner, therefore, I feel that my success depends upon being able to simplify all "medical thoughts" so to speak, so that I can take in a greater variety of subjects, and thereby be able to instruct and explain to the laity, whom I attend, the means of preventive medicine. So, in my talk I shall omit technical names as much as possible, and tell you these things simply as I have practiced them.

The purpose of local treatment in smallpox is to mitigate the burning, itching and pain, and prevent septicemia and scars.

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

Comment.

I only care to suggest this thought in addition to text-book treatment. The last stages of smallpox are caused by aerobic cocci germ infection between the layers of the true and false skin. These germs will only grow in the presence of certain conditions of the skin; and they only liberate their toxine, by absorption, in the presence of moisture. So it is necessary to avoid the moisture. I will tell you how this is done later, as I explain the treatment.

I do not divide the last stages of smallpox into papular, vesicles, pustular and desiccative, I use only two divisions, viz.: papular and purulent, forming stages.

I. In treatment of the papular stage (or, I often call it the preparatory stage), I have the nurse prepare the following articles:

(1) A receptacle containing H_2O_2 sufficient to use for swabbing purposes, also a stiff gauze swab suitable to rub away the epidermis as soon as it loosens over the papulae.

(2) A receptacle with 2 per cent solution of iodine. With an additional swab which should be *soft,* or an atomizer filled with iodine solution, to swab or spray abrasion, just after the H_2O_2 swab has been applied on the exposed abrasion.

(3) The bath water for a tub or sponge bath, the water warm enough for the patient's comfort. Add to bath water the following: Sodium chloride 1 oz., carbolic acid 1 dram, to each gallon of water. The patient should have a bath every twelve hours, and oftener if necessary for the comfort of the patient, to prevent burning and itching, and act as a germicidal agent.

II. Pus stage (or stage for action as far as nurse and doctor are concerned). Use H_2O_2 swab as often as vesicles appear on all papulae. Use iodine swab or spray on all abrasions every twelve hours or oftener for the patient's comfort, if necessary. The nurse should be very careful at any time that pus is forming in a pus pit, it should at once be evacuated and swabbed out with the two above mentioned solutions.

In conclusion I want to say that there will be no pus if you will assist nature with medical aid, and allow no lymph *depositories* to form longer than twelve hours under the epidermis. *There will be no absorption of toxine if no pus pits form. There will be no pitting if pus does not destroy the true skin; therefore, there is nothing to do but to keep the skin free from pus as you would any other abrasion.*

If above treatment is carried out properly in a systematic way, every abrasion will be converted into an excreting surface, instead of an absorption surface, which will eliminate much of the suffering at this stage of the disease. Then, why should we stand by any longer and let our patients be a hot bed for millions of germs to be scattered to the four winds, when we have the means at hand to destroy every one on the surface of the patient with but little danger of infecting the attendant, much less the room and bedding?

DOCTORS SHOULD LEAD.

The medical profession in this county must take a stand for better things in no uncertain manner. Civic betterment must prevail, justice and fairness to the unfortunate must be sustained and trickery tactics relegated to the past. The women voters will not tolerate it and the better people will not have it. That day is past. It is up to the medical profession to be allied among the leaders of thought and the makers of better laws; to be doers in civic uplift work and helpers for better civic-politic conditions.—*The Bucks County* (Pa.) *Medical Monthly.*

OUR KNOWLEDGE OF VITAMINS.

It is generally accepted that a well-balanced diet provides the individual with such vitamins as are necessary to maintain growth and nutrition. The British Medical Journal in a leading editorial reiterates the statement that an abundant supply of vitamins exist in all fresh vegetables and that a considerable quantity occurs in milk and meat, provided the latter substances are obtained from animals fed on fresh foods. A normal adult living on an ordinary diet containing a reasonable proportion of fresh vegetables is, therefore, certain of obtaining a plentiful supply of vitamins. Of all the mass of evidence which has accumulated relative to these substances, this fact is the point of greatest important. It is, however, very unfortunately, the one point which those commercially inclined are unwilling to recognize (Jour. A. M. A., March 11, 1922, p. 734).

THE JOURNAL
OF THE
Arkansas Medical Society

Owned by the Arkansas Medical Society and published under the direction of the Council.

WILLIAM R. BATHURST, Secretary-Editor
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The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

OUR ANNUAL MEETING.

A glance at the preliminary program published in this issue of the Journal should suffice to convince every member of the Arkansas Medical Society that he will be amply repaid by attending the annual meeting in Little Rock, May 17, 18, 19. The meetings will be held in the War Memorial Building (formerly the Old Statehouse) with Hotel Marion right next door, the New Capital Hotel in the next block, the Merchants and Gleason's a block away on Second Street. It would be impossible to select a more convenient meeting place.

As has been repeatedly pointed out in the Journal, the interchange of opinions, the opportunity of hearing papers by distinguished practitioners, the reports of unusual cases and their treatment by brother physicians, should offer the strongest inducements for every member to attend, even at some personal sacrifice. In the practice of medicine and surgery there is always something to learn. In business life or in the trades, or say in an exact science, it may be possible for a man to "know it all," or nearly all. That is not true of either the profession of medicine or the law. Just as new conditions produce new laws, so the constant researches and experiments in medical science and the discovery of better methods of practice produce new matter for study and investigation. It is even possible for the most famous physician to learn something from the humblest practitioner, for the simple reason that the obscure practitioner may have had a case of some rare disease or condition which never has come within the purview of the famous scientist. From this viewpoint alone the progressive physician should let no opportunity escape of attending a gathering of his fellows assembled for their mutual advantage.

Then there is the social side to consider. The doctor from Sebastian County will meet his brother from Miller and the member from the Ozarks will fraternize with his brother from the river bottoms. Old friendships will be renewed and new ones formed. There even is the possibility that some handsome young M. D. may meet some charming member of the other sex among the belles of Little Rock, or among the visiting ladies, and that sweet romance may ensue. Such things are not foreign to previous annual meetings. There is

yet another angle. For the busy practitioner to get away from his daily grind, take a trip for a few days, get into new surroundings, will afford needed relaxation, after which he will return to his practice rejuvenated by his holiday and perchance with some added knowledge to boot. Of course, there will be social entertainments and the ladies of visiting members will be especially entertained.

Several distinguished guests, men of achievement, from other sections will present papers.

The scientific exhibit alone will be well worth the trip, and there will be a commercial exhibit which promises to be about the largest and best on record.

The editors of medical journals in sister States have kindly published notices of this "Home Coming Meeting," and in those notices physicians going to the meeting of the American Medical Association in St. Louis have been invited to stop over in Little Rock for our meeting, fraternize with us and resume their journey.

Altogether there is every reason to anticipate a record-breaking attendance and a most interesting and helpful program.

BUILDING UP THE SOCIETY.

Dr. Eugene H. Winkler, president of the Arkansas County Medical Society, sends to the Journal a copy of an original and unique letter he has sent to every non-member physician in his county, urging him to join the county society. Among other reasons for joining, he says:

"Doctor, if you would attend one or two of our meetings and see what good times we have, and how, in spite of the fact that none of us is great or brilliant, we learn something from the papers and discussions, as well as learning more about each other and find lots of GOOD even in those we might not happen to like; then relaxation for the time being from our cares and worries, I am sure that you would want to join and would make an effort to come often."

For a long, long time the Journal has been urging that efforts be made by each county society to build up its membership. This, in turn, means a stronger, more powerful State society, and Dr. Winkler is to be warmly commended for his effort in this direction. We hope he will succeed in his purpose and that every other county society will follow the excellent example set in Arkansas County.

EDUCATING THE LAYMAN.

Recently in the Arkansas weekly newspapers in the smaller towns there have appeared editorials whose purpose is to educate the people on matters of sanitation, ventilation and disease prevention. One is headed, "Diseases, Not War, Destroy Nations," showing that the decline of Greece was largely brought about through the ravages of malaria; that typhus, malaria, typhoid and the social diseases had more to do with the downfall of Rome than had invasion by the Goths.

Another editorial treats of "The Adenoid Menace;" in another paper is a dissertation on pneumonia and lack of ventilation as a consortive factor; another deals with swatting the fly and the mosquito, and so forth.

We do not know whether these various editorials originated with the rural editors or whether they are syndicated or "canned" editorials. We do know that such articles, having in view the education of the layman in matters touching public health, are an inestimable benefit, and a work in which health officers in every State in the Union might well engage.

V. D. SPECIAL COURSE.

The United States Public Health Service is conducting this month a special 30-days' course at the new government clinic at Hot Springs, in Venereal Disease Control, and Dr. C. W. Garrison, health officer for Arkansas, obtained consent to permit twenty physicians of this State to take this post-graduate course. The announcement of this course, which began April 1, reached us too late to be inserted in the March issue of the Journal.

Editorial Clippings.

GROWING OLD GRACEFULLY.

It has often been said that few medical men grow old gracefully. So many of them who have been honored by their confreres and been eminently successful in public estimation begin to show peevishness, ill-concealed jealousy, and oftentimes an all-around crabbed disposition after they pass middle life, but are still young enough and active enough to continue in practice. Probably this is due to what is commonly termed "slipping," and a realization that reputation and skill are not held in the same esteem as formerly by either confreres or public. Some doctors who have en-

joyed a large and lucrative practice sour on the world when they discover that the volume of professional work is diminishing and patients are deserting them for younger if not more competent confreres. One may be only "as old as he feels," but there is something about the practice of medicine which makes length of service count in the appreciation of confreres as well as public in the estimation of efficiency, and whether we like it or not, or whether it is just or not, the tendency on the part of many people is to count age and length of service after a certain length of time as increasingly depreciative of efficient professional service. This is more apt to be true in those too frequent instances where the successful practitioner gets independent and perhaps tactless with advancing years and increase of reputation and practice. It really is unfortunate that so many medical men feel that they should be able to do as much and as good work in the twilight of life as they did in their prime, and it is really pathetic to see them evidence their dissatisfaction with progress of age and its attending limitations of efficiency. It is perfectly natural that the younger men should step into the shoes of the older men, and there is every reason in the world why the older men should be willing to have them do so and without any sense of regret, jealousy or antagonism. To grow old gracefully may be a difficult problem for many of us to solve, but it is worthy of serious consideration if we expect to hold the love, respect and appreciation which has been accorded us in the prime of life.—*The Journal Indiana State Med. Association.*

Personals and News Items.

Dr. J. H. Phipps, of Roe, visited in Little Rock last month.

Dr. George A. Hays, Texarkana, announces that his practice will be limited to Dermatology and Urology.

Dr. Ira H. Erwin, Newport, is attending the eye, ear, nose and throat clinics in Chicago.

Dr. C. J. March, of Fordyce, visited in Hope and Little Rock last month. On April 3 he was a guest of the Pulaski County Medical Society at a banquet given in Hotel Marion.

Major J. V. Falisi, formerly of Camp Taylor, Ky., and Columbus Barracks, Ohio, is now in charge of basal metabolism, blood chemistry and pathology in the laboratories of the Fitzsimmons General Hospital, Denver, Colo. He reports his work very interesting and his surroundings ideal.

The membership of a number of our brethren is in danger of expiring. We need you. You need us. We cannot afford to lose you. You ought not to forsake old friends. Renew your membership now. Write your County Secretary at once. Do not force us to write the sad obituary: Membership Dead. "Almost, but lost!" *"Hic jacet corpus!"*

The U. S. Public Health Service found the celebration of National Hospital day so popular and so generally satisfactory last year that it heartily approves its repetition this year on Friday, May 12, the anniversary of the birth of Florence Nightingale, founder of modern nursing. On that day the public will be again invited to visit the hospitals in their vicinity as guests and to familiarize themselves with their atmosphere, methods and aims.

The dates for the next two examinations of the National Board of Medical Examiners are as follows:

Parts I and II, June 19, 20, 21, 22 and 23, 1922.

Parts I and II, September 25, 26, 27, 28 and 29, 1922.

Applications for the June examinations should be in the secretary's office not later than May 15, and for the September examination not later than June 1. Application blanks and circulars of information may be had by writing to the secretary, Dr. J. S. Rodman, 1310 Medical Arts Building, Philadelphia, Pa.

REMOVALS.

Dr. T. B. Bradford, Cotton Plant to Brinkley.

Dr. L. H. Stout, Brinkley to Hot Springs.

Dr. J. H. Davis, Waldo to Fouke, Miss.

Dr. W. M. Chavis, Hamburg to Pine Bluff.

Dr. C. T. Price, Hartman to Cash, Tex.

Dr. Ira S. Taylor, Cabot to McCool, Miss.

Maj. J. V. Falisi, Columbus Barracks, Ohio, to Denver, Colo.

Dr. R. C. Kory, Columbus, Neb., to Brazil, Indiana.

Dr. S. G. Hamm, Bass to Wilkinsburg, Penn.

Dr. W. H. Gibbons, Webb City to Ozark.

Dr. L. H. Slocumb, Fort Smith to Ferguson, Mo.

Dr. F. P. Vines, Bauxite to El Dorado.

Dr. J. H. Bohannan, Berryville to Springdale.

Dr. W. L. Wozencraft, Holly Springs to El Dorado.

Dr. J. P. Sheriff, Barringer to Calion.

Preliminary Program.

FORTY-SEVENTH ANNUAL MEETING

ARKANSAS MEDICAL SOCIETY

MAY 17, 18, 19, 1922.

Host: Pulaski County Medical Society.

Meeting Place: War Memorial Building, Little Rock.

Committee on Arrangements and Entertainment: Frank Vinsonhaler, Chairman; Carle Bentley and Homer Scott.

GENERAL INFORMATION.

The House of Delegates will meet at 9:00 a. m. May 17. It may adjourn, from time to time, as may be necessary to complete its business; provided, that its hours shall conflict as little as possible with the Scientific Program.

A majority of delegates registered shall constitute a quorum.

At the first meeting of the House of Delegates a Committee on Nominations shall be selected, consisting of ten delegates. It shall be the duty of this committee to consult with the members of the society and to hold one or more meetings at which the best interests of the society and of the profession of the State shall be carefully considered. This committee will report to the House of Delegates on the afternoon of the last day of the General Session, the names of three members for the office of President and one for each of the other offices to be filled.

COUNCIL.

The Council will meet daily during the session, and at such other times as necessity may require, subject to the call of the chairman.

GENERAL AND SCIENTIFIC SESSION.

MAY 17—2:00 P. M.

"President's Annual Address"—Chas. H. Cargile, Bentonville.

"Present Day Views on the Field of Radiology"—Fred H. Clark, Oklahoma City, Okla.

"Modern Concepts of Tuberculosis"—Gerald B. Webb, Colorado Springs, Colo.

"Sanatorium Care of All Tuberculous"—John Stewart, Booneville.

"Apoplexies and Their Treatment"—J. L. Greene, Hot Springs.

"Some Medical Aspects of Life Insurance"—C. J. March, Fordyce.

8:00 P. M.

"Fractional Gastric Analysis"—W. D. Rose, Little Rock.

"Has the Country Lost or Gained Ground in Treating Cancer in the Different Parts of the Human Body?"—R. C. Dorr, Batesville.

"Syphilis of the Heart"—W. H. Deaderick, Hot Springs.

"Diagnosis of Neuro-Syphilis"—Geo. M. Eckel, Hot Springs. Discussion to be opened by C. C. Kirk, Little Rock.

"The Relation of Syphilis to Railroad Accidents"—Archibald E. Chace, Texarkana.

"Ectopic Pregnancy," report of case—C. V. Scott, Little Rock.

"Fighting the Faddist"—W. T. Wootton, Hot Springs.

"The Darwinian Theory"—Thos. Douglass, Ozark.

MAY 18—9:00 A. M.

House of Delegates.

10:00 A. M.

Memorial Session—Crescent Theatre, 118 West Second Street. To be conducted by Committee on Necrology, F. Vinsonhaler, Chairman, Oscar E. Jones, C. A. Rice, A. S. Buchanan, M. Fink, R. H. T. Mann.

Scientific Session—(Same location).

"Mobilization of Stiff Joints" (moving pictures)—William C. Campbell, Memphis.

"Progress of Kidney Surgery"—John R. Caulk, St. Louis.

"Intestinal Protozoa"—Sidney K. Simon, New Orleans.

1:30 P. M.

(War Memorial Building.)

"Radical Cure of Trigeminal Neuralgia (Major Tic Douloureux)"—Wm. Thos. Coughlin, St. Louis.

"Rational Vaccine Therapy in Ear Infections"—L. Herbert Lanier, Texarkana.

"Pneumaturia Complicating Diabetes, Mellitus, etc."—Frank B. Young, Gering, Neb.

"The Chronic Patient"—Henry Thibault, Scott.

"Significance of Blood Pressure Readings"—A. W. Strauss, Little Rock.

"Congenital Pyloric Stenosis"—W. R. Brooksher, Fort Smith.

"Drug Addiction"—T. B. Bradford, Brinkley.

8:00 P. M.

"The Differential Diagnosis Between Uretal Calculi and Appendicitis"—A. S. Buchanan, Prescott. Discussion to be opened by Dr. Thos. J. Shinn, Wagoner, Okla.

"Disease"—J. T. Clegg, Siloam Springs.

"Sinus Operations" (lantern slide demonstration)—R. H. T. Mann, Texarkana.

"The Duodenal Tube in the Diagnosis and Treatment of Diseases of the Biliary Passages"—Loyd Thompson, Hot Springs.

"Carcinoma of the Cervix"—Dewell Gann, Jr., Little Rock.

"Surgery of Fractures"—Anderson Watkins, Little Rock.

"Treatment of Carbuncle"—A. U. Williams, Hot Springs.

MAY 19—9:00 A. M.

"Peptic Ulcer" "Cholecystitis" (presentation of two patients—J. H. Phipps, Roe.

"Brain Surgery" (report of a case)—Carle E. Bentley, Little Rock.

"Excision of the Sensory Root of the Tri-facial Nerve"—J. H. Scroggins, Little Rock.

"Cesarean Delivery" (report of a case)—G. E. Cannon, Hope.

"Radiation in the Treatment of Menorrhagia"—D. A. Rhinehart, Little Rock.

Subjects to be announced later—E. A. Purdum, Hot Springs, C. Travis Drennen, Hot Springs, L. R. Ellis, Hot Springs.

FINAL MEETING OF HOUSE OF DELEGATES.

FRIDAY, MAY 19—2:00 P. M.

Roll Call.

Report of Nominating Committee and Election of Officers:

President.

First Vice President.

Second Vice President.

Third Vice President.

Secretary.

Treasurer.

Five Councilors.

Further new business.

Adjournment.

FINAL GENERAL SESSION.

(Friday afternoon, May 19, immediately after adjournment of the House of Delegates.)

Calling meeting to order by Chas. H. Cargile, President.

Report of Nominating Committee.

Report of other committees.

New business.

Selection of place of next meeting.

Adjournment sine die.

County Societies.

PULASKI COUNTY.

(Reported by R. J. Calcote, Sec.)

The Pulaski County Medical Society held its regular meeting Monday, April 3, in the banquet room of the Hotel Marion, Little Rock. Following luncheon, addresses were made by Senator Joe T. Robinson, Gov. T. C. McRae and Bishop J. R. Winchester. About one hundred members were present.

MISSISSIPPI COUNTY.

(Reported by F. D. Smith, Sec.)

The Mississippi County Medical Soeiety met in Osceola Tuesday, April 11.

Present: Crawford, Barksdale, Harwell, Massey, Howton, Sheddan, Hudon, Staeey, Johnson, McCall, McRae, Wilson, and Smith.

Papers were read by Drs. Hudson, Stacey and McCall, and Dr. J. R. Lionberger of St. Louis gave a very instructive lecture on Vitamins and illustrated his lecture with stereopticon views.

Our next meeting will be in June at Blytheville and we would like very much to see every member of the society present.

LAWRENCE COUNTY.

(Reported by A. J. Clay, Sec.)

The Lawrence County Medical Society met in regular session Wednesday, April 5, 1922, at the office of Dr. H. R. McCarroll, Walnut Ridge. W. W. Hatcher, president, called the meeting to order.

Clinieal cases of premature birth, tubereulosis, peritonitis, and "Ludwig's Angina," were reported.

Dr. J. C. Land was the essayist for the afternoon. He read a very interesting paper on "Common Venereal Diseases, and Symptomatie Examination and Radical Surgery of Chancroid."

Dr. E. T. Ponder asked for a transfer of his membership to the Pulaski County Medical Society, which was granted.

Dr. J. C. Swindle is spending several weeks in Hot Springs for the benefit of his health.

Present: Clay, Hatcher, Hughes, Land, McCarroll, Thomas, Warren.

DESHA COUNTY.

(Reported by W. H. DeClark, Sec.)

The Desha County Medical Society met at McGehee, March 24, 1922.

Meeting called to order and presided over by Dr. H. T. Smith.

Present: McCammon, Francis, D. T. Cheairs, White, Smith and DeClark.

Officers were elected for 1922. President, H. T. Smith; Secretary and Treasurer, W. H. DeClark; Delegate to State meeting, Vernon McCammon; alternate, D. T. Cheairs.

The membership unanimously endorsed the stand taken by our neighbor, Chicot County, in regard to the proposed Co-operative Community Hospital for Southeast Arkansas, and pledged their whole-hearted co-operation and support of same, at such time as might be appropriate to handle the proposition.

It was resolved that during the present year, we endeavor to have regular monthly meetings and scientific programs of interest to the membership.

JEFFERSON COUNTY.

(Reported by J. T. Palmer, Sec.)

The Jefferson County Medical Society met in regular session, March 7, 1922, in Pine Bluff, Vice President Lowe, presiding. Present: Blankenship, Breathwit, Gill, Jordan, Woodul, Troupe and Palmer.

Dr. Breathwit reported result of recent operation for cleft palate on a child four months old. Patient doing nicely.

Dr. Lowe reported several interesting cases.

Dr. Gill reported pregnancy of 280 days. Lactation present; but no enlargement of uterus discernible. Patient large woman.

Dr. Palmer reported case of intestinal obstruction for twelve days prior to operation. Two days subsequent to surgical procedure bowels moved and diarrhea followed. Patient slowly recovering.

Dr. W. M. Chavis, formerly of Hamburg, was admitted to membership on transfer from Ashley County.

Following the program refreshments were served and a cheerful round table talk was indulged in.

Book Reviews.

Surgical Anatomy.—By William Francis Campbell, M. D., Surgeon-in-chief at Trinity Hospital, Brooklyn, N. Y.; Sometime Professor of Anatomy and Professor of Surgery Island College Hospital. Third edition. Revised. 681 pages with 325 original illustrations. Published by W. B. Saunders Company, Philadelphia, 1921. Cloth, $6.00 net.

The purpose of this volume is to present anatomic facts in terms of their clinical values and thus properly appraise those structures and regions which have a practical interest for the surgeon.

Applied Psychology for Nurses.—By Mary F. Porter, A. B., Graduate Nurse; Teacher of Applied Psychology, Highland Hospital, Asheville, N. C., 12mo of 125 pages. Published by W. B. Saunders Company, Philadelphia. Price $1.50.

We are of the opinion this book for nurses is also appropriate for students of medicine. We wish to quote one paragraph:

"The nurse who can get back of her patient's forehead and put her mind there and let it work from the patient's point of view, will learn a saving sense of humor, will be strict without antagonizing, will clear away a lot of mental clouds and help to make permanent the cure the treatment brings."

The Medical Clinics of North America (Chicago Number), Volume V, Number 1. July, 1921. Published bi-monthly by W. B. Saunders Company, Philadelphia. Price per year, $12.00.

The contents of this number presents nineteen clinics. Dr. Charles Spencer Williamson of Cook County Hospital staff, gives a clinic on "Pericarditis with Effusion." Four patients are presented. In referring to the commonest location of effusion he says, "Pericardial effusions accumulate along the lower margin of the heart; that is, along that portion of the heart which lies in the angle formed by the diaphragm and the anterior chest wall."

The article is illustrated.

The Surgical Clinics of North America (Chicago Number), August, 1921. Volume I, Number 4. Published bi-monthly by W. B. Saunders Company, Philadelphia. Price per year, $12.00.

Among the interesting articles in this issue of the Surgical Clinic we wish to refer to one by Dr. Joseph B. DeLee, Chicago Lying-In Hospital on "Acute Appendicitis in Pregnancy at Term." Summary: Report of two cases of acute appendicitis in pregnancy at term; differential diagnosis between appendicitis and other abdominal lesions; treatment to be employed; obstetric conduct of the case where appendicitis occurs in the eighth and

ninth months of pregnancy; mortality of appendicitis in pregnancy.

Diseases of the Skin—By Henry W. Stelwagon, M. D. Ninth edition revised with the assistance of Henry K. Gaskill, M. D., attending Dermatologist to the Philadelphia General Hospital. 1,313 pages with 401 text illustrations and half-tone plates. Published by W. B. Saunders Company, 1921. Cloth, $10.00.

This book gives the practical part of dermatology in a sufficiently complete manner as to give the work one that will give those engaged in the general practice of medicine a full comprehension of the symptomatology, diagnosis and treatment of the various affections with which they are most likely to come in contact.

In this edition a few of the older illustrations have been eliminated and seventy-four new ones used.

The Spleen and Some of Its Diseases.—By Sir Berkeley Moynihan, of Leeds, England. 129 pages with thirteen full page diagrams. Published by W. B. Saunders Company, London, 1921. Cloth, $5.00 net.

This book contains the material upon which Dr. Moynihan based the Bradshaw Lecture delivered at the Royal College of Surgeons of England in December, 1920.

In the fourteen chapters he describes the anatomy, surgery, functions of the spleen; the pathology of splenic diseases; the clinical and associated phenomena in splenic diseases; pernicious anemia; leukemia; Hodgkins disease; Banti's disease, hemolytic jaundice; Gaucher's disease; differential diagnosis; the liver in some of its relations to the spleen; and the closing chapter on "Conclusions."

The book is beautifully illustrated with thirteen full page plates.

Principles of Medical Treatment.—By George Cheever Shattuck, M. D. Octavo of 312 pages with alternate pages for notes. Fifth Edition. Published by W. M. Leonard, Boston, Mass. Price, $3.50.

This book was first published in 1911 as a "Syllabus of Treatment" and the preface stated "This work represents an attempt to offer clearly and concisely sound principles of treatment based on known pathology. The methods described are those that have been tried at the Massachusetts General Hospital or in private practice.

Through successive enlarged editions this original purpose has been kept in mind. The present edition presents not only revisions, additions and new sections by the author, but additional articles: "Tuberculosis," by Dr. John B. Hawes; "Acute Infections Most Common In Childhood," by Dr. Edwin H. Place; "Influenza," by Dr. Gerald Blake; "Diabetes," by Dr. Benjamin H. Ragle; "Serum Treatment of Pneumonia," by Dr. Henry M. Thomas.

Lessons on Tuberculosis and Consumption.—By Chas. E. Atkinson, M. D., recently Medical Director of the Seymour Sanatorium for Diseases of the Throat and Lungs, Banning, California; formerly member of the resident medical staff at the Pottenger Sanatorium for Diseases of the Throat and Lungs, Monrovia, California; previously attending physician and instructor in the Medical Clinic of the Graves Memorial Dispensary, Los Angeles Medical Department of the University of California; member of the National Tuberculosis Association; Fellow of the American Medical Association. Published by Funk & Wagnalls Company, New York.

This volume will enable pulmonary tuberculosis patients to more thoroughly understand the treatment which the physician prescribes and more intelligently and wholeheartedly co-operate with him in his efforts to give them health. It is written for popular reading and study, and will be easily understood by the layman.

So far as we know, there is no other work which goes into such expressive detail on each and every phase of the subject on which the average man or woman desires accurate and specific answers. It will calm the groundless fears of sufferers, make them realize the importance of following the physician's instructions, and encourage them to be sensibly optimistic.

History of Medicine, With Medical Chronology Suggestions for Study and Biographic Data.—By Fielding G. Garrison, M. D., Lt. Colonel, Medical Corps, U. S. Army, Surgeon General's Office, Washington, D. C. Third edition, revised and enlarged. Octavo of 942 pages with 257 portraits. Published by W. B. Saunders Company, Philadelphia, 1921. Cloth, $9.00 net.

In this revised and instructive edition we find the following has been accomplished: A careful account has been rendered of the newer findings of Sudhoff, Neuburger, Wickersheimer, Singer and other European investigators of ancient and medieval medicine; new matter has been added on the doctrine of the origin and transmission of ethnic culture (convergence and convection); on Chinese medicine; on the history of pediatrics; dentistry; public hygiene; military medicine; and medical lexicography; on the earlier nuclei of medical education in the United States; on recent Japanese, Spanish, and Latin-American medicine; and on the work of the medical department of armies in the European War. A number of new biological sketches have

been added with portraits of Symphorian Champier, Villemin, Gurly, Littre, Salkowski, Osler, Max Neuburger and others.

Medical Clinics of North America (The Mayo Number), Volume V, Number 2. September, 1921. Octavo of 317 pages, eighty illustrations. Published by W. B. Saunders Company, 1921, Philadelphia. Published bi-monthly. Price per clinic year, paper, $12.00. Cloth, $16.00.

Among the interesting articles in this issue we wish to comment on "Hypersensitivity to Food Proteins" by Arthur Sanford. He refers to protein sensitization as an etiologic factor in bronchial asthma. Dr. Sanford states: "No case of bronchial asthma that has occurred before the fortieth year, especially if the dyspnea is of the expiratory type, can be considered to have been studied completely until an attempt has been made by means of skin sensitization tests to demonstrate proteins of some sort as the etiologic factor. If the patient does not give a history of seasonal attacks of asthma, accompanied possibly with hay-fever, or if contact with animals does not seem to be part of the story, and skin tests with the protein of animal emanations are negative or, if the history is not that of repeated respiratory tract infection and skin tests to the most common bacterial proteins are negative, common food proteins must be suspected of being responsible for the condition, and a careful study of the history of the patient be coupled with a judicious selection of those proteins for tests may reveal the cause."

Nostrums and Quackery.—Articles on the nostrum evil, quackery and allied matters affecting the public health reprinted with or without modifications, from The Journal of the American Medical Association. Volume II, illustrated, 832 pages. Published by the American Medical Association, 535 N. Dearborn St., Chicago, Ill. Price, $2.00.

Ten years ago the American Medical Association published the first edition of the first volume of this book. A year later a second, and enlarged edition of the first volume was issued. Since that the The Journal of the American Medical Association has published, week after week, articles on the nostrum evil, quackery and allied matters affecting the public health. All this material has been collected and appears in the present volume.

Quackery can never be defended; the "patent medicine" business, however, need not be fundamentally fraudulent. There is a place for home remedies for the self-treatment of simple ailments. Unfortunately, the home remedies of today are, generally speaking, those secret nostrums commonly called "patent medicines" and the methods of "patent medicine" promotion make these products a menace to the public health. The average "patent medicine" is so advertised as to frighten well people into the belief that they are sick for no other purpose than that of causing them to purchase the nostrums.

The present volume is a veritable encyclopedia of information on the subject it treats. The book contains nineteen chapters. The titles of some of these are: "Alcohol, Tobacco and Drug Habit Cures," "Consumption Cures," "Cosmetic Nostrums," "Deafness Cures," "Epilepsy Cures," "Female Weakness Cures," "Nostrums for Kidney Disease and Diabetes," "Medical Institutes," "Miscellaneous Nostrums," "Obesity Cures," "Quackery of the Drugless Type" and "Tonics, Bitters, Etc."

This partial list of chapters gives but a poor idea of the vast fund of information contained in the book. To make the volume still more valuable it contains an index of twenty-two pages, two columns to the page, which includes references to every article appearing in the first volume of "Nostrums and Quackery" as well as to all articles in the present volume.

The book is free from stilted or highly technical language. The articles have evidently been written with the idea that the facts they contain belong to the public. In the preface, it is emphasized that the work which this volume represents is wholly educational in character—not punitive. "The matter that appears in this book has been prepared and written in no spirit of malice and with no object except that of laying before the public certain facts the knowledge of which is essential to a proper conception of community health."

The Secretary of the County Society will please notify the State Secretary immediately of any error or change in these officers.

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Original Articles.

"DIFFICULTIES ENCOUNTERED IN ORTHOPEDIC SURGERY."*

F. Walter Carruthers, M .D., Little Rock.

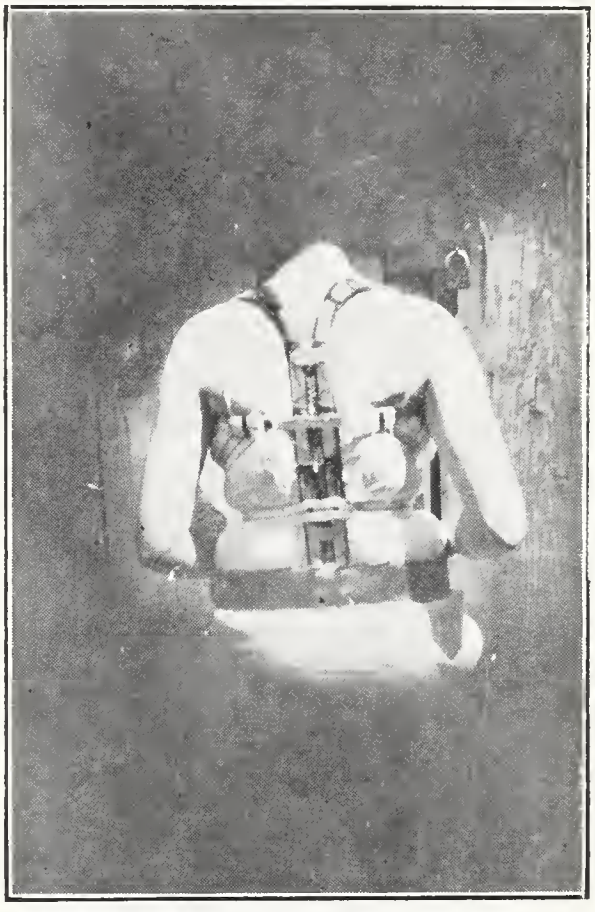
In approaching this subject I have tried to select those cases which I thought would be of interest to you; first, from the standpoint of the condition itself; second, the difficulty encountered in proper treatment of such conditions, particularly from the orthopedic surgical viewpoint.

These cases which I wish to present are not necessarily those you would class as "special;" but are the cases which one encounters almost daily in the practice of medicine. On the other hand, it is the history of the case and the individual care that is necessary, that arises in every case that makes this or that case appear "special" as you would term it. However, there are certain fundamental facts that you must follow in the course of treatment of every case. The one that varies in the course of treatment makes it necessary for you to follow a certain line of treatment.

The first case which I wish to present is a very interesting one to me, and one that is often encountered in the practice of medicine:

History of present condition:

V. P.—Female, age 21. Examined January 25, 1921. She was brought to the hospital in a state of semi-consciousness. Her friends stated that about one hour before while in a down town department store shopping she opened an elevator door, stepped in and fell through the shaft, landing on a concrete floor, fifteen feet below. She was carried out, profoundly unconscious. Thirty minutes later she developed convulsions which lasted fifteen minutes. After arrival at the hospital she would at times arouse herself and complain of her back hurting.



Illustrating article by Dr. Carruthers.

Examination showed good nutrition. Marked pallor and evidence of profound shock; however, the patient could partially be aroused. The pupils were regular in outline and reacted sluggishly both to light and accommodation. Both shins and knees were bruised. At the region of the twelfth dorsal vertebra there was a slight kyphosis, and she complained of pain on pressure. There was no other complaint.

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

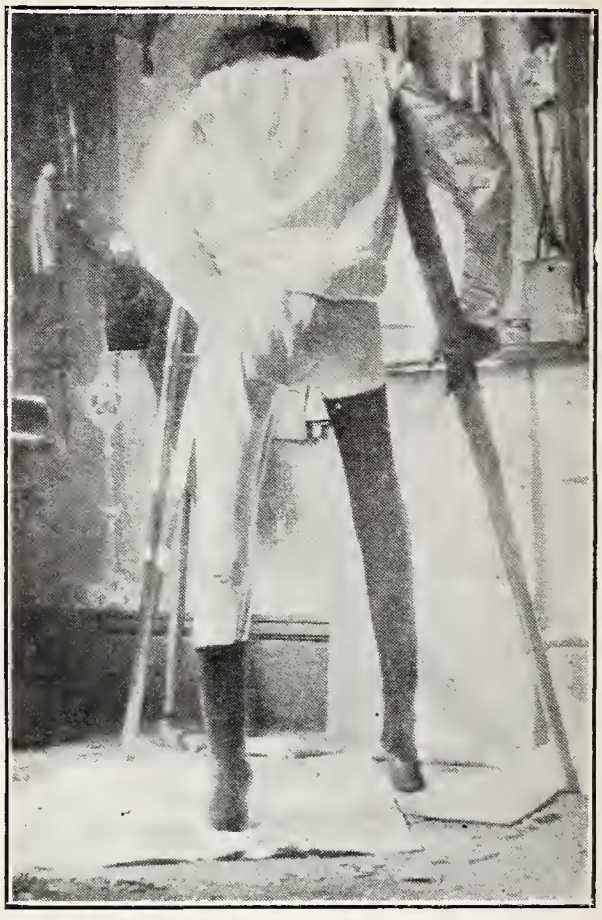
X-ray of the spine in both lateral and anterior posterior views were made, showing a lateral displacement to the right of the twelfth dorsal and first lumbar vertebra.

She was put to bed immediately and placed upon a Bradford frame with Buck's extension and five pounds of weight to both limbs. The bed was elevated. A pad was placed on the frame at the point of the injury. The patient was kept absolutely quiet on this frame for two weeks at which time another x-ray was made, showing the vertebra in perfect line and good position. However, the patient was not permitted to be up; but remained on the frame for four more weeks at which time a properly fitted Taylor brace was applied. She is now wearing it with perfect comfort. (I might say here that she tried, at her request, to go without brace before it was made; but on account of severe pain and discomfort in back she was willing to try anything. She now states that she would not take a thousand dollars for it).

Just a word about braces in general. The physician must see to it that the brace of whatever kind, performs its proper function by proper fitting, to constitute the mechanics of action; otherwise nothing can be gained. Sending the patient to a bracemaker with directions to make a brace for this or that individual without knowing what is to be accomplished by the brace and without knowing the mechanical principles which are involved, is exactly as sensible as sending a man to the druggist with the request that he give him something for brain abscess. Nevertheless, this is done every day, and the patient suffers the consequences.

The next case is one of a young man age twenty-three. Came to the hospital on stretcher with injured back caused from driving a wagonload of hay under a barn shed. He was jammed between hay and joist, which doubled him up completely, pushing him forward until his head was well between his legs. This suddenly caused extreme pain in lower back, immediately followed by loss of motion and sensation in both legs and complete loss in control of bladder and bowels.

X-ray was made at once, which showed a crushing fracture of first lumbar and dislocation of the second lumbar vertebra. On account of his physical condition he was placed on a Bradford frame and spine fixed in plaster jacket. Operation was delayed five days, at which time an Albee bone graft was performed on his back, with autogenous graft taken from his tibia. He made an uneventful recovery; however, he has never been able to completely control the bladder or bowels. A properly fitted Taylor brace was made for his back, and the ordinary limb brace for his limbs. He is now doing very well and is able to walk some.



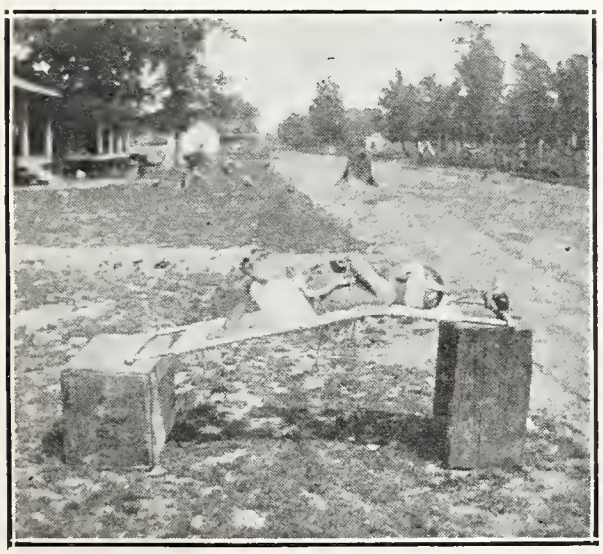
Illustrating article by Dr. Carruthers.

The next case is one of infantile paralysis in a boy of eighteen years of age. The onset of this case was seven years ago when he was eleven years of age. The paralysis involved both limbs and right arm. It goes without saying that he came very near to dying. The right thigh is markedly contracted at the hip and the leg is pulled outward at the hip and the leg is pulled outward at the knee. The deformity is very characteristic of this condition. This leg is absolutely useless to him, the left is weak and unstable, he also has a marked scoliosis. This boy has been treated and seen by a number of eminent surgeons. They all pronounced the case hope-

less and that nothing could be done for him.

After my examination I told his mother that I could not promise her much by an operation; but I thought I could improve his condition. She willingly consented to have anything done that might help him, and said she felt very much encouraged because I would even offer to do anything. The following day he was operated, at which time I did a complete Soutter operation at the hip reducing the flexion deformity and just below the knee I did an osteotomy reducing the outer deformity at the knee. Then I was able to bring the leg into a straight line from the hip. It was immobolized in a long Lorenz spica cast in which it remained for six weeks. He made an uneventful recovery, after which some properly fitted braces were applied. He now goes about very well and is once more a useful citizen.

The next one is a case of tuberculosis of the spine, a condition very often seen, but unfortunately mistreated, or untreated; first, by being sent often to a chiropractor or osteopath; second, untreated because it is looked upon as hopeless. This case fully demonstrates the average case you see. It is a boy about three years of age. The complaint began about September 1, 1919, at which time he fell from the steps of his porch at home. Soon afterward a knot was seen to appear in the upper region of his spine near the cervico-dorsal junction. For the past eight months it has not increased any in size; but the boy has continued to run down



Illustrating article by Dr. Carruthers.

in health. He holds his head and neck rigid and supports his body with his hands and arms on his knees while walking and whatever he might be sitting on. That symptom alone will diagnose your case. X-ray was made, showing a tuberculosis involvement of first and second dorsal vertebra. He was immediately placed upon a Bradford frame and five pounds of extension applied to his head. He was put on a nutritious diet and advised to be placed out in the open without clothes and exposed to sunlight. This was done systematically. He returned for further observation in six weeks, the x-ray will show his marked improvement. He had also gained in weight and was looking fine. The mother was kind enough to bring the boy here on the frame for your inspection and you are at lib-

Illustrating article by Dr. Carruthers.

erty to question and examine him all you wish. I expect in a short time to do an Albee bone graft on this boy and then apply a Taylor brace and let him up, and in course of a short time he should be entirely well.

Another important thing has come to my mind in dealing with the question of relief of weight bearing of the lower extremities, and after a thorough search and investigation I was not able to find any brace or apparatus for such a condition, so I have de-

vised one of my own. It is indicated in all conditions where weight bearing of the lower extremity might be needed, following such conditions as Potts' fracture and all deformities about foot and ankle. The brace is here for your inspection and I will also demonstrate its use upon the screen. It is made simply by taking a cast imprint of the leg just below the knee. It is very necessary that this be carefully made. A leather socket is made and then the two steel uprights are attached and run down under shoe similar to a caliper brace. These bars transmit the weight to the knee and take it off the ankle. This can also be used for thigh when it is necessary to transmit the weight to the hip.

BOWEL OBSTRUCTION—REPORT OF CASES.*

G. E. Cannon, M. D., Hope.

It would be impossible to fully discuss, as we should, the subject of bowel obstruction. The field is too broad, so we confine our paper to the acute form and will give our discussion mainly from experience. We hope to show some cases caused by several pathological conditions; thus stimulate thought along this line and may be aid us in early diagnosis, so early and proper treatment may be had, and thus more lives may be saved.

Intussuseeption is one of the most common causes of obstruction and is found more in the infant up to one year old than any other age—thirty-four per cent are in this age. At the ileocecal valve is the point most often involved, but it may be found anywhere from the stomach to the sigmoid. The sigmoid is a common place for obstruction, mostly caused by torsion. Near the stomach intussuseeption is prone to occur. Volvulus causes collapse of a section of the intestine and in this form we see that part of the bowel lose its blood supply, get small and produce all the symptoms found in obstruction. We have seen several children who occasionally have attacks which seem like a stasis only, because after two or three days they have a bowel movement and get up and go on as usual. These, we believe, are volvulus in a mild form.

Bands of adhesions cause partial or complete obstruction, depending upon the amount of tension produced. Fecal impaction is seldom a cause of acute obstruction, but it is occasionally seen. Any form of hernia is a common cause, especially femoral, inguinal and post operative. Adhesions in the abdomen following abdomenal operations, and especially where iodine is poured into the abdomen, are common causes and we have seen our very worst case where more gangrenous intestine was found, in an abdomen in which iodine had been used two or three years previously. There is no doubt that iodine poured into the abdomen will help combat infection, but the after results are dangerous. Do not forget that a general peritonitis is often the cause of intestinal stasis and obstruction and if your differential diagnosis is not clear you may overlook the peritonitis and call it only a bowel obstruction. We have seen it in the latter stages of general peritonitis where the symptoms of obstruction were most prominent and the bowel almost gangrenous, but caused by the pressure of pus, gas and general distension in the abdomen. Blows on the abdomen by baseballs, kicks from animals and such like often cause obstruction. These cases can often be relieved by persistent medical treatment.

At post mortem we sometimes find intussusception which must have occurred in the dying hour, because it had never given any symptoms previously. In one man aged sixty-five years, who had been bothered for a long time with frequent mucous movements, showed a two-inch invagination which was rather easily reduced. Our decision in this case was that it had existed for some time.

The symptoms of obstruction are pain, either constant or intermittent, depending on the cause, and always severe; vomiting until stercoraceous matter is expelled, and lack of through bowel movements with practically no variations at first from normal in temperature or pulse. At first there are bowel movements which contain the fecal matter below the obstruction, followed with straining and blood-streaked mucus resembling in appearance and odor that found in colitis. The abdomen is often soft and doughy and sometimes a tumor can be located at the point of obstruction. These are mostly cases of intussusception and the mass is sausage shaped and slightly sore. Later on the abdomen becomes ballooned, and the gas shows most in the intestine just above the obstruction. There is seldom a rise of temperature except toward

*Read before the Arkansas Medical Society, at the Forty-fifth Annual Session, Hot Springs, May, 1921.

the last which then may be accompanied by a rapid pulse and much prostration.

The main thing to differentiate between is peritonitis, though in the beginning we might have a perforation from injury by a truss, a blow, typhoid fever or even a ruptured appendix, and the contents of the bowel pouring out into the abdomen and not yet a peritonitis. With a careful history and close examination of the patient these conditions should be detected.

In a peritonitis we have a rise of temperature, more rapid pulse, a more pinched expression and a rigid abdomen. This should be rather easily differentiated from simple obstruction. The abdomen possibly houses more disease than any other part of the body and every physician should do his best to learn it. The living pathology shown at our great clinics, post mortem examinations, and a good knowledge of anatomy will be our greatest diagnostic teachers.

Early diagnosis and treatment in all these cases mean more than anything else. First examine all outlets for hernia. A hernia may be the cause and it be overlooked. It is not so necessary to try to determine the kind of obstruction because the treatments for all are very much the same. Neither is it necessary to spend a great deal of time in giving purgatives or enemas. It is all right to give a good purge, but do not keep repeating it. A few enemas of one dram of turpentine, one ounce each of salts and glycerine to six ounces of water given at two or three hour intervals would be giving our patient a square deal; but continued till he is fagged out would be folly. We have seen patients literally exhausted by persistent enemas and purgatives and also delayed beyond the time when operative procedures will benefit. If a few wise efforts will not move the bowel, arrange for a hasty opening of the abdomen and try to correct the lesion. A very much greater per cent of recoveries come with operations in the first twenty-four hours than later. During and after the third day we lose most of them. The general practitioner and the surgeon both agree that these are surgical cases after the first few hours of sensible efforts at medication. If the general practitioners will not hold the patients too long, but will confer with the surgeon early, we shall not see so much gangrenous viscera and so many deaths in two or three days.

It is needless to discuss at length the operation because all text books give it better than we can, but a few words might be of service. Operate in the first day if possible; but if not possible, operate anyway unless your patient is too near dead. It does very little harm to open the abdomen quickly and try to relieve. If there is no gangrene you have a good chance of saving life because your patient is going to die unless your surgery relieves. If gangrene is there you seldom do any good unless it is in the very robust and there is very little gangrene to remove. Very often you will be surprised how much and how soon your intestine will regain its tone when placed back in the abdomen after it has been relieved. A good rule to go by when you are in doubt whether to resect or let alone, always let alone. If you can not determine just where your obstruction is, it seems possibly best to open the abdomen by the right rectus incision. When open and the intestines begin to pour out of the abdomen, do not lose time trying to replace them because this is aiding you to find what you want. Make as much haste as you can, and shock your patient the least possible; but never in any operation make haste ahead of good, gentle work. Many times the handling of the viscera will produce a stasis of the bowel for twenty-four hours or more and you will be worried very much for that time by not getting bowel movements and think you had not relieved the patient. If the vomiting has ceased, the abdomen gone down and the patient looks better, cheer up; because you will soon see things looking better.

These cases are reported to show the variety of causes of obstruction and why it is necessary for early work:

Cases 1 and 2. Two negro men about the same age and from the same town entered the hospital about the same time with strangulated inguinal hernia. One had been sick one day and the other about three days. Both had loops of intestine strangulated and both looked almost gangrenous. The one of three days' standing was not able to have a resection done and the other one seemed to have enough vitality to possibly overcome the condition. We did not try resection in either case. The one of longer standing died on the second day after operation and the other one went rapidly to recovery. Had both been done early both should have recovered. We can all recall cases of strangulated femoral and inguinal hernias that were too far ad-

vanced for surgical procedures to benefit and we left them to die without doing anything.

Case 3. A negro woman with feeble, rapid pulse, a rather soft distended abdomen and a deathlike expression, giving a history of no bowel movement since Monday previous, was brought to the hospital on Sunday afternoon. All the six days she had been given heavy purges and some enemas. Those bringing her were told that an operation was the only hope and there seemed none offered by it. At their request, however, we opened the abdomen and found a band of adhesions cutting off the lumen of the bowel and almost causing an ulcerated condition possibly produced by the peristalsis of the intestines. This band was removed and the abdomen closed with much guessing about the future. By the next morning the bowels had moved twice and by the following afternoon about fifteen more times. This worried us until we remembered how much purgatives they said had been given. The next day she was much better and in two weeks she returned home a well woman.

Case 4. Mrs. S. was a white woman about twenty-six years of age. About two years before she had been operated upon for some pelvis trouble and iodine used in the abdomen. At nine p. m. such severe pains begun in the abdomen that her husband gave her a quarter of a grain of morphine hypodermically when he failed to get us. Later in the night we had to give her nearly a grain to relieve the pain. At eight the following morning we advised an operation for the relief of bowel obstruction, but her husband refused to have it done. Another doctor was called, who began giving salts every fifteen minutes and enemas and their hopes were that they might soon see her relieved. This was continued till next morning when they called us back to get ready to operate. Our advice was that then it was too late for operation and we would do it only with the understanding, that we would not be blamed if the patient should not be benefited. The promise by the husband was disregarded and we were severely criticised by the neighbors, the husband and the other doctor, after the patient died. When the abdomen was opened all the intestine that was visible was gangrenous. A quantity of serum and blood was removed from the abdomen and the lumen of the intestine and the abdomen closed with drainage. Next morning the patient felt so well the husband wanted us to again open the abdomen and resect the gangrenous intestine. When we told him it was impossible, he said the other physician told him it could be done, and if we would not do it, he wanted another surgeon. The second surgeon came but offered him no hope. The patient died early that night. Our lessons here are two: Do not delay and after you have done your dead level best and tried to be thoroughly honest, you need not be surprised at anything you hear afterward, especially when an unethical man gets into the same case.

Case 5. Mary H., a tiny, four-year-old white child, was brought to the hospital on the third or fourth day of the disease. Every effort to move the bowels had been tried, and she was exhausted. We all felt that it was just a chance and at one time we thought a refusal to operate would be the wisest procedure. When we opened the abdomen, about eight inches of the small intestine was twisted and almost thread-like, with practically no blood. As soon as it was straightened out the color came back and the abdomen was closed. After a week the child was sent home to her happy parents. It makes us feel good now to see her playing and happy two years afterward, and to know we had the courage to go ahead and try.

Case 6. This case was interesting because of its age and existing circumstances. On a Sunday morning a doctor, and the father and mother of a five-months-old babe brought it to the hospital. It was vomiting, abdomen very much distended and it had rather frequent bloody mucus stools. The nurse spoke of the stool being just like that of colitis in looks and odor. The father had never expected to have any of his family operated upon, but was now willing. In fact, he seemed more anxious to have it done than we were to do it. It did not take long to get every one lined up with the same idea of its father, that if anything would help it was surgery. The abdomen was opened in the right rectus and it looked like all the intestines rolled out, blue and distended. We finally found the intussusception up near the stomach and by some difficulty it was released. Soon the viscera regained tone. It seemed that the worst trouble had been a blocking of the venous outlet from the mesentery. Most of the gas was forced out at the rectum. No bowel movements for twenty-four hours and

a very sick child; but after that the bowels moved and improvement was very rapid. On the sixth day we sent home a happy mother and father and a well baby, and they left behind a doctor and a bunch of nurses who felt like sometimes we may do good.

THE DIAGNOSIS AND SURGICAL TREATMENT OF GASTRIC AND DUODENAL ULCERS.*

Leith H. Slocumb, M. D., Fort Smith.

There are few subjects of more interest to the surgeon and the internist alike than the subjects of gastric and duodenal ulcers. Ulcer of the stomach and duodenum should properly be discussed together, since the first part of the duodenum in which 90 per cent of the duodenal ulcers are found is embryologically and physiologically identical with that of the stomach.

From a historical standpoint gastric ulcer is much better known than duodenal ulcer. The presence of ulcers in the stomach has been known for several centuries. It was not until about the beginning of the nineteenth century that the condition of ulcer of the duodenum began to be known.

It was not until 1900 that anything very definite became known as to the pathology and treatment of these conditions. About that time interest in the subject began to rise. Moynihan reported his first operation for duodenal ulcer.

Weir's address to the American Surgical Society on perforating ulcer of the duodenum and Mayo's report in 1904 helped to further interest in the subject. Since that time interest in the subject has gained rapidly, partly through a better knowledge of the pathology of these conditions and partly through a better understanding of its manifestations, both objectively and subjectively.

This better understanding has come about largely by increased and better laboratory facilities, rapid strides in gastro-intestinal roentgenology; and last, but not least, by greatly improved technic in this field of surgery.

During the past twenty years there has been a vast amount of investigation along these lines and to these investigators belong the credit of practically all we know concerning the subject.

The etiology of gastric and duodenal ulcer is so obscure that it is almost impossible in many cases to establish a cause. Aside from syphilis and tuberculosis there are two great etiological factors: (1) Disturbances of circulation such as appear in chlorosis, at the beginning of menstruation and at the climacterium or cessation of menses. Under this consideration might be mentioned a paper recently written by T. B. Reeves of the Mayo Clinic. The subject of the paper is "A Study of the Arteries supplying the Stomach and Duodenum and Their Relation to Ulcers." He concludes, "That the anatomic arrangement of the arteries along the lesser curvature of the stomach and the first inch of the duodenum are such that the arteries are predisposed to thrombosis."

At a time when there is a general disturbance of the circulation, such as there is at the beginning and at the ending of the menstrual phase, this anatomic factor might play an important part. (2) The second great etiological factor is that of mechanical influences. Under this classification the principal cause is trauma from whatever origin. In this class of injury the gastric juice digests that portion of mucous membrane that has been injured, thus the beginning of an ulcer. This ulcer might become chronic under improper treatment and lead to cicatrix formation. Arterio-sclerosis or an occasional attack of acid gastritis might conceivably become a cause of ulceration.

Rosenaw's work published in 1916 on "Etiology of Ulcer" no doubt helps throw some light on the subject.

Be the etiology what it may, it has very little bearing on the diagnosis at the present time and none whatever on the surgical treatment. In the matter of diagnosis it would seem that ordinarily ulcer of the stomach or ulcer of the duodenum should present no difficulty.

The fact is, however, that many a patient is operated upon for chronic appendicitis or gall bladder disease and for a time may do very well. He may be relieved entirely from symptoms for a considerable length of time. The complete rest in bed, strict dietary regime to which post-operatives are subjected, is if not an ideal ulcer treatment, at least, it is one that relieves them from symptoms. Sooner or later these patients return with

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their same old train of symptoms. A mistake has been made in diagnosis.

In the matter of diagnosis I would here like to emphasize the importance of a careful detailed and routine anamnesis. This is of importance in any line of work, but more especially so with a gastro-intestinal disease; because in this particular line of work subjective symptoms are largely what we have to deal with. Without a most careful history, laboratory findings, x-ray findings and physical findings, it is almost impossible to interpret correctly.

For instance, in the matter of laboratory findings an acid gastritis might give identical findings with those of ulcer. Likewise, a case of achylia gastrica might closely simulate a case of beginning carcinoma. In both of these instances a careful anamnesis would aid very much in making a differential diagnosis.

In taking a history, I do not allow a patient to recite aimlessly a long array of mixed subjective and objective symptoms; but rather require him to answer in a short concise manner. These answers are not put down in the patient's words, but are carefully analyzed and the result or analysis is really the physician's interpretation of the patient's story. In this way a great deal of time is saved and a more accurate history is obtained. After the history and physical examination has been made, the patient is instructed to return at a certain time the following day for further work. He is instructed to return at a certain time with the stomach empty; or rather, he is instructed to eat or drink nothing for at least sixteen hours previous to the test. Also, he is told to bring a specimen of stool for analysis.

A Refus tube is inserted into the fasting stomach and all of the contents are withdrawn. The fasting contents are in some instances more important than the test meal contents. After the fasting contents have been removed the patient is given a test breakfast of 30 gm. of shredded wheat, well ground and 400 cc. of water. This is removed at the end of 45 minutes by the same method. If these gastric contents show an acid reaction, then the patient is brought back the next day for a so-called fractional gastric analysis. This consists of giving 30 gms. of shredded wheat and 400 cc. of water and removing 10 cc. portions at intervals of fifteen minutes. This is continued for a period of from an hour and a half to two hours and a half, according to whether the stomach empties rapidly, or according to the type of acid curve found. At this time also, a routine blood examination is made, including a red and white count, a differential, hemoglobin and a Wassermann. Also, of course, a specimen of urine is obtained and analyzed. The patient is allowed to return to his home and the next morning returns again with a fasting stomach.

A fluoroscopic examination is made in the vertical position and when the cap is seen to fill, a plate is quickly made also in the vertical position. He returns in the afternoon for a six-hour plate and again the next morning for a twenty-four hour plate.

After the fluoroscopic examination and the plates have been completed he is given an enema and a sigmoidoscopic examination is made using a medium size Tuttle proctoscope. The complete findings including the history, are then gathered together, interpretations made and conclusions drawn. It is only by such a correlation of the different findings that a differential diagnosis can be made with any degree of certainty and a differential diagnosis should not be attempted until the case has been subjected to at least this much detail.

Carmen summarizes his opinion regarding diagnostic methods in the words, "In short, I believe that no diagnosis can be too strongly fortified, and that any gross discordance between the findings from all sources should make the examiner cautious in his opinions."

In this paper I do not care to take time to go over all of the text-book picture of the symptomatology of gastric and duodenal ulcer. The syndrome is too well known.

It is well, however, to mention a few pertinent points usually present in these conditions. First of all, the chronicity and periodicity are usually very definite. The history usually extends over a number of years, with definite periodical attacks, usually in the spring or fall. This last is so constant that any clinic doing much gastro-intestinal work will usually be overrun with ulcer cases during these periods. The gastric symptoms are not diagnostic, though the patient will usually complain of either one or all of them; namely, belching, water brash, regurgitation, nausea or vomiting.

The pain history is usually typical. One can seldom make an individual with gastric or duodenal ulcer say that his pain is only a.

discomfort. Also the time of the appearance of pain is usually quite definite.

The dietary history is usually typical. During the period when the ulcer is at rest, or when there are no symptoms present, the diet as a rule is very little restricted. During the period when symptoms are present, however, the dietary discriminations are very definite.

The bowels are usually constipated, because of the self-chosen diet that these patients subject themselves to. There is usually not much loss of weight.

I have found one constant symptom not usually brought out in the text books, and that is, shortness of breath. Most all ulcer patients, during their period of storm, complain more or less of shortness of breath. This is not a true dyspnea, but rather the continual desire to take long, deep inspirations.

In the matter of laboratory findings the blood usually shows little or nothing. Its examination is chiefly of value because of its aid in a differential way.

The gastric contents usually show a hyperacidity of both free and total hydrochloric acid.

The stool usually shows occult blood and little else of value.

Fluoroscopic examination will in a large percentage of cases show a deformed cap, or a break in the stomach outline. Either of these, combined with an increase in motility, makes the diagnosis fairly definite.

The matter of differential diagnosis between gastric and duodenal ulcer is in most cases difficult. Here we can do no better than to quote the Mayo Clinic figures.

As regards sex and age, there is no difference. Chronicity and periodicity are about the same. Pain history is usually more severe and located more to the left and higher up in the gastric ulcer than in the duodenal. In duodenal it comes on from two to five hours after eating and in gastric one to two hours after. Gastric symptoms are more severe in gastric ulcer than in the duodenal type. Vomiting is more constant with gastric than with duodenal.

The diet is more limited with the gastric type and there is usually more fear of eating with the gastric type. Food relief is more constant in the duodenal and the relief is of longer duration. Small amounts, frequently in the gastric type, give more relief than larger amounts at longer intervals. This also holds good for alkalies. Alkalies relieve the duodenal more constantly and for a greater length of time. In the matter of gastric analysis, gastric ulcer is not easily distinguished from the duodenal.

Roentgenographic examination in duodenal shows a deformed cap and in gastric a niche or filling defect. Except where there is a gross defect in the gastric type, diagnosis is often difficult. The gastrics are usually much sicker patients than the duodenals.

In taking up the treatment of the two types there is a good deal of controversy going on at the present time regarding same. Most every one admits that there are cases of ulcer that have been cured by medical treatment.

At the Mayo Clinic they seem only lukewarm as to the value of medical treatment. Moynihan states, "Relief from an attack in a case of chronic duodenal ulcer is easy; a cure of the condition by medical means is, I believe, almost impossible. The lesion found is of such a nature that anything other than surgical treatment is not worth considering. It is safer, speedier and more certain than any other mode of treatment."

W. S. Lemon of the Mayo Clinic states: "It has been our experience at the Mayo Clinic that patients who have grown weary of being so often 'cured' medically, come for surgical help." He states again, however, "It has been our practice in very recent cases to ask the patient to undergo medical treatment and give the ulcer the best opportunity for spontaneous healing. Long standing ulcers, we believe, do not heal and should be surgically treated to remove the danger of hemorrhage and perforation."

Sippi, of Chicago, has done a vast amount of careful work along these lines. He gives only six indications for surgical interference:

(1) Secondary carcinoma.

(2) Perforation into the free peritoneal cavity.

(3) Pyloric obstruction of high grade due to indurated tissues narrowing, that fails to yield to medical treatment.

(4) Perigastric abscess.

(5) Hour glass stomach.

(6) Hemorrhages.

No doubt, there is much to be said on both sides. After all, an ulcer at some stage of its

life must necessarily be an early ulcer. If one can recognize this early form and can treat it properly over a necessary period of time, I am sure that medical means offer a fair percentage of cures.

For the ulcer of long standing, where induration has taken place. I believe that surgical measures offer a surer and safer cure. By far the most frequent operation performed for peptic ulcer is gastro-enterostomy. Although the operation is unsound from a physiological and mechanical standpoint, in selected cases the results are good. These selected cases are cases in which a definite pathology is present, such as benign pyloric stenosis, duodenal or gastric ulcer and, as a palliative measure, carcinoma.

There is a class of functional disorders which may closely simulate organic disorders and these are the cases, when operated give poor results and discredit the operation.

There has been much written as to the proper procedure to adopt. The first gastro-enterostomies were of the anterior long loop variety. Later the long loop posterior operation came into vogue. These often developed vicious circles and, to obviate this, the loop was united proximal to the gastro-enterostomy by suture or button, the pylorus was incised and its ends closed.

The operation was changed by some surgeons to plastic enlargement of the pylorus. This relieves obstruction due to pylorospasm, but does not change the acidity of the stomach.

At this time the short loop and later the no loop was devised. The posterior no loop gives by far the best results. The thing that was overlooked was the fact that gravity played no part in the emptying of the stomach, and it would remain dilated unless it was relieved by its own peristaltic efforts and that these efforts could not overcome obstruction in the intestine. If obstruction is present, the stomach will remain dilated until the obstruction is removed.

Two other conditions cause dilatation; first, wide excision of ulcers on the lesser curvature, which destroys innervation and, second, interference with the mesenteric circulation.

In excision by the Balfour method, pariesis seldom takes place. The operation is done as follows: The gastro-hepatic omentum is dissected away from the lesser curvature in the region of the ulcer. The ulcer is then burned through with the cautery at a dull red heat and the whole area of the ulcer is burned out to healthy tissues. The opening is closed with catgut and fine silk mattress sutures. The reflected gastro-hepatic omentum is then replaced over the line of suture and held in place by a few fine silk sutures. Gastro-enterostomy is then performed as usual. There is a marked difference of opinion as to the advisability of excising gastric ulcers. Some surgeons excise them whenever possible, giving as their reason, the frequency of malignant degeneration following gastric ulcer. On the other hand, those who do not follow this practice, oppose it on the grounds that it is not only unnecessary, but leads to destruction of innervation, and subsequent dilatation with loss of function.

An ulcer on the anterior wall may be excised without much difficulty. Ochsner's pyloroplasty method makes the procedure comparatively simple.

The most generally adopted operation of this principle is the pyloroplasty and gastro-duodenostomy of Finney. This procedure permits in most cases, the safe excision of the ulcer, and a thorough inspection of the mucous membrane in the region of the pylorus. This operation he has named lateral gastro duodenostomy.

Ochsner says, in part, regarding this operation: "Results following pyloroplasty or gastro-duodenostomy, in benign stricture of the pylorus and in the simple ulcer of the stomach and duodenum, especially when situated in the anterior wall, are more satisfactory than those following gastro-enterostomy.

Among the special advantages offered by this operation is that it retains to a large extent, the normal relationship between the stomach and duodenum; and, as already mentioned, permits of the removal of any ulcer of the anterior wall. It also permits of treatment of ulcers of the posterior wall to some extent.

YEAST FOAM TABLETS.

Shorn of verbiage, "Yeast Foam Taablets" are claimed to be dried yeast in the form of tablets. They are put up in typical "patent medicine" style. The advertising for these tablets would lead the public to believe that it is in imminent danger of suffering from an inadequate supply of vitamin B. Though the yeast foam propaganda is plainly addressed to the public, specimen packages have been sent to physicians. Thus, the profession is given once more the opportunity to act as an unpaid peddler (Jour. A. M. A., April 8, 1922, p. 1074).

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WILLIAM R. BATHURST, Secretary-Editor
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The advertising policy of this Journal is governed by the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

All communications of this Journal must be made to it exclusively. Communications and items of general interest to the profession are invited from all over the state. Notice of deaths, removals from the state, changes of location, etc., are requested.

Editorials.

THE MAY MEETING.

On May 17th the Arkansas Medieal Society will convene in what promises to be one of the best annual meetings ever held, and certainly it will offer one of the best programs in the history of the society. There has been quite a good deal of detail work, but as the time for the meeting approaehes the eompleteness and harmonious arrangement of the program beeomes more and more eonvineingly apparent. It will be found in full on another page of this issue of the journal.

It will be news to most of our readers to learn that this will be the Forty-seventh Annual Session instead of the Forty-sixth. Away baek in 1907 the Thirty-first was held. By an error, not diseovered at the time, the Seeretary earried the same number into the next year's meeting and it is so reeorded on its minutes to this day. The diserepaney was diseovered only reeently when at the suggestion of President Cargile, the reeords were cheeked for possible errors. Errors, unfortunately, ean not in all eases be eorreeted. When they ean be there is no exeuse for not making the eorreetions; therefore, this year's meeting will go down in history eorreetly numbered as the Forty-seventh.

After the appeal the Journal made in the April issue urging every member to attend, even if attendanee requires some personal saerifiee, there remains little more to say on that head. If you are tempted to stay away, read over that appeal in your last month's journal. Peruse it earefully and prayerfully if you are so inelined, and COME. You will be sorry if you miss the program and the exeellent soeial entertainment promised. Bring the wife along—if you have one. If not, you'll perhaps find a future wife here—you never ean tell.

QUACKERY AND ADVERTISING.

Many of the most reputable and influential of the daily newspapers have, of late years, done the publie and the medieal profession a serviee by refusing the advertising of quaek medieines and proprietary remedies of doubtful merit or none at all. These inelude the so-ealled speeifies, nerve tonics, marvelous eurative lotions, stuff that will eure almost anything from tubereulosis to a wart (aeeording to the announeements and "testi-

monials'') ; medicine that will renew youth, make curly hair straight and straight hair curly; in short, relieve almost anything, including separating the humbugged purchaser from his money. Nor does the evil stop at that, because "A fool and his money are soon parted" anyway; but many a person who needs intelligent medical treatment buys these nostrums and suffers on until perhaps too late for proper treatment.

It is discouraging, however, in view of the unselfish stand taken by so many of the secular papers, turning away business for the good of humanity, to find some of the religious papers taking the business the secular papers refuse. We have before us a certain denominational paper of sixteen pages, the front page being free of advertising. On the remaining fifteen pages there are no less than eighteen advertisements of the very kind that many daily papers bar from their columns. These include alleged remedies that are known and proven humbugs. If the church papers accepting such business are not aware that these are humbugs, then their business managers are sadly behind the times. If they know and still accept them they are guilty of letting money take precedence of church ethics. Possibly the editors do not know what their business managers are doing. They should watch their patent medicine advertisements and have a word to say about the policies of the papers they editorially conduct; for with a church paper it is the name of the editor which often inspires the reader with confidence in its editorial utterances and the other matter contained in its columns.

GOOD WORK AT PINE BLUFF.

A campaign of malaria control work is made possible at Pine Bluff by the action of her Chamber of Commerce, which body appropriated $1,000.00 as the nucleus of a fund to which the City Council, Clearing House Association and the Cotton Belt Railroad will be asked to contribute equal amounts, making a total of $4,000.00. Dr. C. W. Garrison, State Health Officer, attended the meeting April 24, at which time the Chamber of Commerce took this action. He told the members of the work done at Crossett in malarial control and the splendid results attained, total of 687 cases in the year previous to inauguration of the work, being reduced to only eight —practically eliminating the disease. Work will be begun in destroying the mosquito larvae in a low-lying section in a portion of the city known as the old lake bed, through which a small stream meanders on its way to the river.

This is most excellent work for the Chamber of Commerce. Usually such bodies are concerned with the visible results of inducing new enterprises to invest capital in the community; in new factories; in developing industries already existing and in other ways doing things for the material advancement of their cities as expressed in terms of dollars and cents. We should say that in devoting its money and efforts in the direction of preservation of health, the Pine Bluff Chamber of Commerce has a vision of the future which will inure to more lasting benefit—including financial advancement for that matter—than in merely getting new industries and new capital interested in the city. The best advertisement any city can have is a good health and mortality statistical report.

PHYSICAL EXAMINATION OF SCHOOL CHILDREN.

The modern public school, unlike that of the past, is more than a mere educational institution, as the term educational usually is used. Physical betterment of the race must come from the physical examination conducted which bring to view deficiences, physical and mental, and suggest methods of correction. For example, the one feature of eye examination shows that among the ten million children in the public schools approximately one-half have eyes more or less defective. In most cases these could have been remedied if attended to earlier, and in many cases there still is time for correction. The latest plan for better physical betterment is in the ascertaining what children are undernourished and applying the remedy in providing milk and otherwise prescribing diets, which will bring them up to standard and where parents are unable to afford the daily portions of milk or other diet, the same is supplied without cost.

A sound mind in a sound body is the theory on which this work is being conducted and the results are most encouraging.

Personals and News Items.

On March 30, 1922, the physicians of Wynne and other points in Cross County got together and organized a county medical society, with eleven members to start. Great credit is due to Dr. Thos. Joe Stewart, Dr. Thos. Wilson and others for their energy, activity and the spirit of co-operation elicited. We congratulate the entire membership and are delighted to place them in our galaxy of choice spirits. May they live long and prosper. We trust the contagion may spread among other counties not now organized, or which need rejuvenation. We have added two counties so far during the year and we have room for others now for some unknown reason holding aloof.

Removals.

W. W. Hornsby, Haileyville, Okla., to North Little Rock.

H. V. H. Stroupe, Roff, Okla., to Paris.

Floyd Webb, Turrell to Parkin.

INTESTINAL PARASITES AS A FREQUENT CAUSE OF UNDIAGNOSED MALADIES IN CHILDREN.

The importance of considering intestinal parasites in differential diagnosis is emphasized by Allen H. Moore, New Market, Va. (Journal A. M. A., April 22, 1922). In one case the symptoms were typical of typhoid. Ten days after the initial onset, the patient passed an immense round worm. Castor oil was given that night, followed the next morning with santonin and calomel. In a few hours the patient passed twenty-seven huge round worms. There was a prompt and uneventful recovery. In the second case, a diagnosis of intestinal obstruction, intussusception, was made, and a surgical operation advised. Operation revealed a large mass of round worms coiled about a fecal impaction. In the third case convulsions obscured the diagnosis.

PROGRAM

FORTY-SEVENTH ANNUAL SESSION

OF THE

ARKANSAS MEDICAL SOCIETY

LITTLE ROCK, MAY 17, 18, 19, 1922

OFFICERS

President—Chas. H. Cargile, Bentonville.

First Vice President—Don Smith, Hope.

Second Vice President—A. M. Elton, Newport.

Third Vice President—J. O. Rush, Forrest City.

Secretary—William R. Bathurst, Little Rock.

Treasurer—R. L. Saxon, Little Rock.

COUNCILORS AND COUNCILOR DISTRICTS

First Councilor District—Clay, Crittenden, Craighead, Greene, Lawrence, Mississippi, Poinsett and Randolph Counties. Councilor, Thad Cothern, Jonesboro. Term of office expires 1923.

Second Councilor District—Cleburne, Fulton, Independence, Izard, Jackson, Sharp and White Counties. Councilor, J. L. Jones, Searcy. Term of office expires 1922.

Third Councilor District.—Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff Counties. Councilor, E. D. McKnight, Brinkley. Term of office expires 1923.

Fourth Councilor District.—Ashley, Bradley, Chicot, Cleveland, Drew, Desha, Jefferson and Lincoln Counties. Councilor, J. M. Lemons, Pine Bluff. Term of office expires 1922.

Fifth Councilor District—Calhoun, Columbia, Dallas, Lafayette, Ouachita and Union Counties. Councilor, F. E. Baker, Stamps. Term of office expires 1923.

Sixth Councilor District—Hempstead, Howard, Little River, Miller, Nevada, Pike, Polk and Sevier Counties. Councilor, J. H. Stidham, Hope. Term of office expires 1922.

Seventh Councilor District—Clark, Garland, Grant, Hot Spring, Montgomery, Saline and Scott Counties. Councilor, W. T. Wootton, Hot Springs. Term of office expires 1923.

Eighth Councilor District—Conway, Faulkner, Johnson, Perry, Pope, Pulaski and Yell Counties. Councilor, Robert Caldwell, Little Rock. Term of office expires 1922.

Ninth Councilor District—Baxter, Boone, Carroll, Marion, Newton, Searcy, Stone and Van Buren Counties. Councilor, R. H. Huntington, Eureka Springs. Term of office expires 1923.

Tenth Councilor District—Benton, Crawford, Franklin, Logan, Madison, Sebastian and Washington Counties. Councilor, John Stewart, Booneville. Term of office expires 1922.

DELEGATES TO AMERICAN MEDICAL ASSOCIATION

William R. Bathurst, Little Rock.

George S. Brown, Conway.

COMMITTEES

SCIENTIFIC PROGRAM

St. Cloud Cooper, Fort Smith, Chairman; M. D. Ogden, Little Rock, and William R. Bathurst, Little Rock.

SCIENTIFIC EXHIBIT

D. A. Rhinehart, Little Rock, Chairman; J. D. Southard, Fort Smith; Chas. E. Oates, Little Rock; M. V. Laws, Hot Springs.

MEDICAL LEGISLATION

Robert Caldwell, Little Rock, Chairman; George S. Brown, Conway; J. A. Bogart, Forrest City; J. T. Clegg, Siloam Springs, O. M. Bourland, Van Buren; A. C. Jordan, Pine Bluff.

NECROLOGY

F. Vinsonhaler, Little Rock, Chairman; Oscar E. Jones, Newport; C. A. Rice, Rogers; A. S. Buchanan, Prescott; M. Fink, Helena; R. H. T. Mann, Texarkana.

HEALTH AND PUBLIC INSTRUCTION

L. Kirby, Harrison, Chairman; Thomas Douglass, Ozark; H. A. Ross, Arkadelphia; Chas. H. Cargile, Bentonville (ex officio); William R. Bathurst, Little Rock (ex officio).

CANCER RESEARCH

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INFANT WELFARE

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WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

J. M. Lemons, Pine Bluff, Chairman; Thad Cothern, Jonesboro; Henry Thibault, Scott; R. Y. Phillips, Malvern; W. R. Brooksher, Fort Smith.

HOSPITALS

C. S. Pettus, Little Rock, Chairman; John Stewart, Booneville; R. C. Dorr, Batesville; J. I. Scarborough, Little Rock; E. F. Ellis, Fayetteville; J. J. Smith, Paris.

ARKANSAS STATE BOARD OF HEALTH

C. W. Garrison, Little Rock, State Health Officer; O. L. Williamson, Marianna; C. F. Crosby, Heber Springs; Leonidas Kirby, Harrison; H. R. Webster, Texarkana; H. L. Montgomery, Gravelly; S. A. Southall, Lonoke; F. O. Mahoney, El Dorado.

STATE BOARD OF MEDICAL EXAMINERS OF THE ARKANSAS MEDICAL SOCIETY

J. A. Bogart, Forrest City; J. T. Palmer, Pine Bluff, J. W. Walker, Secretary, Fayetteville; J. C. Swindle, Walnut Ridge; W. F. Smith, President, Little Rock; H. A. Ross, Arkadelphia; W. H. Toland, Nashville.

ANNOUNCEMENTS

All meetings of the House of Delegates and the Scientific Sessions and the Scientific Exhibit, except the Memorial Session, will be held on the second floor, War Memorial Building. The Commercial Exhibit and the Registration Booth will be near the entrance on the first floor.

REGISTRATION

It is important for all members on arriving to register at the Secretary's desk and receive the official program and a badge.

ENTERTAINMENTS

Fraternity dinner (Chi Zeta Chi), Thursday, 7:00 p. m., Marion Hotel.

The Ladies' Entertainment Committee will announce their program at the time of registration.

The ladies are cordially invited to attend all the scientific sessions and we particularly ask your presence Wednesday, 8:00 p. m., War Memorial Building. At the registration desk cards will be provided for the ladies, as well as our members, to register their names, giving name of hotel or residence while in the city.

NOTICE

All papers read at this meeting are the property of the Arkansas Medical Society, and as soon as read should be handed to the Secretary.

COMMERCIAL EXHIBIT

Promises to be of high grade, and will be in the corridors of the War Memorial Building.

HOUSE OF DELEGATES

The regular annual meeting of the House of Delegates of the Arkansas Medical Society will be held on May 17, 1922, at 9:30 a. m., second floor, War Memorial Building.

CHAS. H. CARGILE, *President,*
WM. R. BATHURST, *Secretary.*

Meeting called to order by Chas. H. Cargile, President.

Invocation—By Rev. John Van Lear, Pastor First Presbyterian Church, Little Rock.

Address of Welcome for the Physicians of Little Rock—Dr. R. F. Darnall, President Pulaski County Medical Society.

Response to the Address of Welcome on Behalf of the Delegates of the Arkansas Medical Society—Dr. M. L. Norwood, Delegate of the Sevier County Medical Society.

Appointment of the Credentials Committee and their report.

Calling roll of Delegates.

Adoption of the Minutes of the Forty-sixth Annual Meeting as published in the July issue of the Journal of the Arkansas Medical Society.

Appointment of Reference Committee.

President's Address to the House of Delegates.

REPORT OF COMMITTEES

Scientific Program—St. Cloud Cooper, Chairman.

Scientific Exhibit—D. A. Rhinehart, Chairman.

Medical Legislation—Robert Caldwell, Chairman.

Necrology—Frank Vinsonhaler, Chairman.

Health and Public Instruction—Leonidas Kirby, Chairman.

Cancer Research—E. E. Barlow, Chairman.

Infant Welfare—G. A. Warren, Chairman.

Workmen's Compensation and Social Insurance—J. M. Lemons, Chairman.

Hospitals—C. S. Pettus, Chairman.

Arrangements and Entertainment—Frank Vinsonhaler, Chairman.

Report of the Council—Robert Caldwell, Chairman.

Report of the Secretary.

Report of the Treasurer.

Reading of Communications.

Reading of Memorials and Resolutions.

Selection of the Nominating Committee.

Miscellaneous Business.

MEETING OF THE COUNCIL

The Council of the Arkansas Medical Society will meet at noon with luncheon at Hotel Marion immediately following the adjournment of all morning sessions.

FORTY-SEVENTH ANNUAL MEETING

GENERAL SESSION

WEDNESDAY, MAY 17, 1922, 1:30 P. M.

Calling of the Society to order—Chas. H. Cargile, President.

Invocation—Rev. P. C. Fletcher, Pastor First Methodist Church, Little Rock.

Address of Welcome for the City—Hon. T. C. McRae, Governor of the State of Arkansas.

Address of Welcome for the Profession—Robert Caldwell, Little Rock.

Response to the Addresses of Welcome on Behalf of the Arkansas Medical Society—Henry Thibault, Scott.

President's Annual Address—Chas. H. Cargile, Bentonville.

(The Scientific Session will convene immediately following the General Session.)

SCIENTIFIC SESSION

"Present Day Views on the Field of Radiology"—Fred H. Clark, Oklahoma City, Okla.

"Modern Concepts of Tuberculosis"—Gerald B. Webb, Colorado Springs, Colo.

"Sanatorium Care of All Tuberculous"—John Stewart, Booneville.

"Apoplexies and Their Treatment"—J. L. Greene, Hot Springs.

"Some Medical Aspects of Life Insurance"—C. J. March, Fordyce.

8:00 P. M.

"Disease"—J. T. Clegg, Siloam Springs.

"Fighting the Faddist"—W. T. Wootton, Hot Springs.

"The Chronic Patient"—Henry Thibault, Scott.

"The Darwinian Theory"—Thos. Douglass, Ozark.

"Drug Addiction"—T. B. Bradford, Brinkley.

THURSDAY, MAY 18, 8:30 A. M.

Executive Session House of Delegates.

MEMORIAL SESSION

9:30 A. M.

Crescent Theatre, 118 West Second Street. To be conducted by the Committee on Necrology, Frank Vinsonhaler, Chairman, Oscar E. Jones, C. A. Rice, A. S. Buchanan, M. Fink, and R. H. T. Mann.

DECEASED MEMBERS

Levi Crawford, Marked Tree, April 6, 1921.

S. P. Vaughter, Little Rock, May 3, 1921.

E. H. Martin, Hot Springs, May 5, 1921.

John W. Patton, Morrilton, May 11, 1921.

B. L. Hill, Stuttgart, June 19, 1921.

A. G. Thompson, Pine Bluff, August 18, 1921.

A. L. Carmichael, Little Rock, August 29, 1921.

J. C. Chenault, England, September 28, 1921.

J. M. Spikes, Swartz, November 13, 1921.

I. M. Poynor, Berryville, November 21, 1921.

B. H. Green, Warren, December 19, 1921.

D. F. Wilson, Hampton, January 28, 1922.

W. A. Smith, Walnut Ridge, January 30, 1922.

Jno. M. Bearden, Springdale, February 5, 1922.

J. J. Johnson, Biggers, February 8, 1922.

L. H. Hall, Pocahontas, February 20, 1922.

SCIENTIFIC SESSION

(Crescent Theatre)

"Mobilization of Stiff Joints" (moving pictures)—William C. Campbell, Memphis.

"Progress of Kidney Surgery"—John R. Caulk, St. Louis.

"Intestinal Protozoa"—Sidney K. Simon, New Orleans.

1:30 P. M.

(War Memorial Building.)

"Radical Cure of Trigeminal Neuralgia (Major Tic Douloureux)"—Wm. Thos. Coughlin, St. Louis.

"Rational Vaccine Therapy in Ear Infections"—L. Herbert Lanier, Texarkana.

"Pneumaturia Complicating Diabetes Mellitus, etc."—Frank B. Young, Gering, Neb.

"Significance of Blood Pressure Readings"—A. W. Strauss, Little Rock.

"Has the Country Lost or Gained Ground in Treating Cancer in the Different Parts of the Human Body?"—R. C. Dorr, Batesville.

"Fractional Gastric Analysis"—W. D. Rose, Little Rock.

"Congenital Pyloric Stenosis"—W. R. Brooksher, Fort Smith.

8:00 P. M.

"Diagnosis of Neuro-Syphilis"—Geo. M. Eckel, Hot Springs. Discussion to be opened by C. C. Kirk, Little Rock.

"The Diagnosis of Syphilitic Aortitis"—W. H. Deaderick, Hot Springs.

"The Relation of Syphilis to Railroad Accidents"—Archibald E. Chace, Texarkana.

"The Duodenal Tube in the Diagnosis and Treatment of Diseases of the Biliary Passages"—Loyd Thompson, Hot Springs.

"Carcinoma of the Cervix"—Dewell Gann, Jr., Little Rock.

"Radiation in the Treatment of Menorrhagia"—D. A. Rhinehart, Little Rock.

"Surgery of Fractures"—Anderson Watkins, Little Rock.

FRIDAY, MAY 19—8:30 A. M.

"Peptic Ulcer" "Cholecystitis" (presentation of two patients)—J. H. Phipps, Roe.

"Ectopic Pregnancy" (report of case)—C. V. Scott, Little Rock.

"Sinus Operations" (lantern slide demonstration)—R. H. T. Mann, Texarkana.

"The Differential Diagnosis Between Uretal Calculi and Appendicitis"—A. S. Buchanan, Prescott. Discussion to be opened by Dr. Thos. J. Shinn, Wagoner, Okla.

"Carbuncle"—A. U. Williams, Hot Springs.

"Excision of the Sensory Root of the Tri-facial Nerve"—J. H. Scroggins, Little Rock.

"Brain Surgery" (report of a case)—Carle E. Bentley, Little Rock.

"Cesarean Delivery" (report of a case)—G. E. Cannon, Hope.

"Observations in the Treatment of Psoriasis"—E. A. Purdum, Hot Springs.

FINAL MEETING OF HOUSE OF DELEGATES.

FRIDAY, MAY 19—2:00 P. M.

Roll Call.

Report of Nominating Committee and Election of Officers:

President.

First Vice President.

Second Vice President.

Third Vice President.

Secretary.

Treasurer.

Five Councilors.

Further new business.

Adjournment.

FINAL GENERAL SESSION.

(Friday afternoon, May 19, immediately after adjournment of the House of Delegates.)

Calling meeting to order by Chas. H. Cargile, President.

Report of Nominating Committee.

Report of other committees.

New business.

Selection of place of next meeting.

Any Scientific papers not previously presented.

Adjournment sine die.

Book Reviews.

THE SURGICAL CLINICS OF NORTH AMERICA.—Issued serially, one number every other month). Volume I, Number 6 (The New York Number), 295 pages, including complete index to Volume I and 122 illustrations. Published by W. B. Saunders Company, Philadelphia, 1921. Per clinical year (February 1921, to December, 1921): Paper, $12.00 net; cloth, $16.00 net.

This issue contains twelve interesting surgical clinics. Dr. Willian A. Downes, St. Luke's Hospital, presents two patients' illustrating the value of jejunostomy in the treatment of certain ulcers of the stomach and calls attention to the use of this procedure as a palliative measure in inoperable carcinoma of the stomach. He describes the technic which in his hands has proven satisfactory.

THE SURGICAL CLINICS OF NORTH AMERICA.—(Mayo Number). Issued serially, one number every other month. Volume I, Number V, 296 pages with 163 illustrations. Published by W. B. Saunders Company, Philadelphia. Price per clinic year (February, 1921, to December, 1921): Paper, $12.00 net; cloth, $16.00 net.

We wish to refer to one article in this number that of "Observations in the Management of Chronic Frontal Sinusitis with External Manifestations; Report of Twenty-two Cases," by Dr. Harold I. Lillie. He says, "A two-stage operation has many advantages in the management of frontal sinusitis with external manifestations; the external operation requires good exposure, careful elimination of pockets and the leveling of bone edges."

SUBMUCOUS RESECTION OF THE NASAL SEPTUM—By W. Meddaugh Dunning, M. D., Consulting Otologist, Fordham Hospital, New York City; Consulting Otologist, Ossining, N. Y.; Assistant Surgeon Manhattan Eye and Ear Hospital, New York; Surgeon Bronx Eye and Ear Infirmary, New York. Over one hundred pages of text, illustrated by twenty-five pages of drawings, printed upon heavy coated book-paper and substantially bound in cloth. Price, $1.50 postpaid. Published by Surgery Publishing Company, 15 East 26th St., New York City, N. Y.

A most complete and comprehensive book describing the very latest technic in Submucous Resection of the Nasal Septum. Its contents thoroughly cover the Nose; Breathing and Smelling; Common Septal Deviations; Surgical Procedure in Submucous Resection of the Nasal Septum; Special Surgical Procedure; Typical Case Histories and their Significance; The Saddle Back Nose, etc.

The minutest technic of the operation and text is clearly visualized by twenty-five especially prepared drawings. It is the only recent book upon this subject.

MEDICAL CLINICS OF NORTH AMERICA.—(Volume V, Number III, The Philadelphia Number, November, 1921). Octavo of 362 pages, forty-four illustrations. Published by W. B. Saunders Company, 1921. Published bi-monthly. Price per clinic year: Paper, $12.00; cloth, $16.00.

A large number of clinics are given in this issue. Dr. Jas. M. Anders refers to the diagnosis of the harmless forms of cardiac disturbance. "Functional Cardiac Disturbance; Premature Contractions; Cardiac Hydrothorax; A. Myocardial; B. Valvular."

THE MEDICAL CLINICS OF NORTH AMERICA.—(Issued serially, one number every other month). Volume V, Number IV, January, 1922. By New York Internists. Octavo of 214 pages, with thirty-eight illustrations. Published by W. B. Saunders Company, Philadelphia. Per clinic year (July, 1921, to May, 1922): Paper, $12.00 net; cloth, $16.00 net.

We call attention to the timely and important question discussed by Dr. Harlow Brooks, on "The Treatment of Pneumonia" in this issue. No specific treatment is given, but he refers to successful treatment, as depending chiefly on the prompt and individualistic application of many well-established medical procedures applide at the proper time.

Many other well worth reading clinies appear of vast interest to the medical profession.

YEAST PREPARATIONS AND VITAMIN-B CONCENTRATES.

The Council on Pharmaey and Chemistry has adopted the following principles as a guide in the consideration of yeast preparations and vitamin B concentrates for New and Nonofficial Remedies: 1. The claim that deficiency of vitamin B and diseases resulting therefrom are common conditions in the United States is not at this time warranted. 2. The claim that yeast preparations or extracts are, in principle or in general, essentially more effective or more praetical or a more available means of administering vitamins than the commonly available vitamin-eontaining foods is not at this time supported by adequate acceptable evidence. 3. The elaim that therapy with yeast or yeast preparations has as yet more than an experimental status is not at this time supported by adequate acceptable evidence (Jour. A. M. A., April 15, 1922, p. 1146).

THE THERAPEUTIC USE OF YEAST AND VITAMIN PREPARATIONS.

Newspapers and magazines eontain gratuitous reminders that we are eonfronted with menaces to health which not only ought to be averted but which can readily be remedied, when present, by the simple expedient of a potent proprietary vitamin preparation. If some of the claims of the advocates of a widespread yeast or vitamin therapy regarding the danger of vitamin starvation were warranted, one might still question whether the speeial "concentrated" or vitamin-rich medicaments were required to remedy the situation. An extensive inquiry has led the Council on Pharmacy and Chemistry to the deduction that disease states attributable to lack of vitamin-B are not widespread in this country at the present time. Even an enthusiast will be forced to agree with the Council that yeast or yeast vitamin therapy has as yet nothing more than an experimental status (Jour. A. M. A., April 15, 1922, p. 1127).

GOD'S AMEN!

(To Joseph MacDonald, Jr., M. D.

It can not be that he has passed into the Land-of-the-Far-Away;
This friend of mine whose hand I elasped—and talked with yesterday!
I see him now, his faee aflame, glowing with joy to be again
Able to work and play the game, even as other men.
All he asked was to play his part, to finish the work he craved to do,
Keeping faith with a loyal heart, always staunch and true
And so he lived. But who can tell how he suffered with courage grim.
Waiting the call he knew full well was bound to eome to him.
Other men would have been dismayed, crushed by the weight of doubt and fear;
But he was a soldier unafraid, even tho' death was near.
Brave and fearless, he did not shirk, but gave himself to his fellowmen,
Asking naught but the boon of work, 'til God should say "Amen."
God's "Amen"! I would ask no more than to know I had as surely won
The right to hear, when my task is o'er, the Master say "Well Done"!

—H. Edwin Lewis, M. D., Amer. Jour. Surgery.

The Secretary of the County Society will please notify the State Secretary immediately of any error or change in these officers.

DIRECTORY

OF THE

COUNTY SOCIETIES OF THE ARKANSAS MEDICAL SOCIETY

1922

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