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# The Wisconsin Medical Journal

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## A Monthly Journal of Medicine and Surgery

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#### Contributors to Original Articles to Vol. XIV

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Alpin, Floyd M., M. D., Waukesha. Axtell, Luella E., M. D., Marinette.

Beier, A. L., M. D., Chippewa Falls.
Bellin, Julius J., M. D., Green Bay.
Black, Nelson M., M. D., Milwaukee.
Brown, E. B., M. D., Beloit.
Brown, Lawrason, M. D., Saranac Lake, N. Y.
Bunting, C. H., M. D., Madison.

Carhart, G. A., M. D., Milwaukee. Connel, D. R., M. D., Beloit. Cook, F. S., M. D., Eau Claire. Crownhart, Hon, Chas, H., Madison.

Darling, Walter G., M. D., Milwaukee. Doege, K. W., M. D., Marshfield. Drexel, Arnold, M. D., Milwaukee.

Evans, Edward, M. D., La Crosse.

Fairchild, W. E., M. D., Green Bay. Fiedler, Otho, M. D., Sheboygan. Fletcher, E. A., M. D., Milwaukee.

Greeley, H. P., Waukesha

Hammes, E. M., M. D., St. Paul, Minn. Higgins, Samuel G., M. D., Milwaukee. Hitz, Henry B., M. D., Milwaukee. Holbrook, A. T., M. D., Milwaukee. Hopkinson, Daniel, M. D., Milwaukee.

Ivy, Robert H., M. D., D. D. S., Milwaukee.

Jackson, R. H., M. D., F. A. C. S., Madison.

Kastner, A. L., M. D., Milwaukee. Kopetzky, S. J., M. D., New York.

Levings, A. H., M. D., Milwaukee.

Longley, J. R., B. Sc., M. D., Fond du Lac. Lorenz, W. F., M. D., Mendota.

Marshall, Victor F., B. S., M. D., Appleton. McBeath, N. E., M. D., Livingston. Merrill, W. G., Ph. C., M. D., 1st Lieutenant, M. R. C., Grand Rapids.

Newman, John R., M. D., Madison.

Pfister, Franz, M. D., F. A. C. S., Milwaukee. Phalen, Major J. M., M. C., U. S. A. Portens, R. W., M. D., Rochester, Minn.

Quick, Edw. M. D., Milwaukee.

Redelings, T. J., M. D., Marinette. Rodman, W. L., M. D., Philadelphia, Penn. Rogers, A. W., M. D., Oconomowoc. Rogers, Philip F., M. D., Milwaukee. Rosenberry, A. B., M. D., Wausau.

Schiller, Leopold, M. D., Milwaukee. Sleyster, Rock, M. D., Waupun. Smith, Eugene A., M. D., Milwaukee. Sputh, Carl B., M. D., La Crosse. Studley, Frank C., M. D., Milwaukee.

Tuohy, E. L., B. A., M. D., Duluth, Minn.

Van Valzah, Robert, M. D., Madison.

Warfield, Louis M. M. D., Milwaukee. Wilkinson, M. R., Oconomowoc. Winn, Hanry Newton, Madison.

Yates, J. L., M. D., Milwaukee.

Zaun, Geo. F., M. D., Milwaukee. Zimmermann, C., M. D., F. A. C. S., Milwaukee.

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## The Wisconsin Medical Journal

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Number 1

#### ORIGINAL ARTICLES

SOME DEDUCTIONS FROM THE MEDI-CAL EXAMINATION OF FIVE THOU-SAND STUDENTS ENTERING THE UNI-VERSITY OF WISCONSIN.\*

BY ROBERT VAN VALZAH, M. D.,

MADISON.

The routine medical examinations of students entering the University of Wisconsin during the past four years, and the subsequent observations of the relation of the clinical findings to health and general efficiency of these students, have led to conclusions of value to those interested not only in the prevention of acute diseases, but also of the pathological processes, both immediate and long delayed, secondary to them.

These medical examinations have been made for the purpose of gaining accurate clinical data as to the antecedents, the past medical and social conditions and the present physical condition of individuals in that decade of life between seventeen and twenty-seven. With the exception of a similar compilation of statistics made at the University of California, we believe the statistics on which this study is based, is the first compilation of data dealing with the pathologic conditions found in young adults of both sexes, who are of high mental development and reared in comparatively comfortable surroundings by a generation of intelligent people, anxious to prevent disease and its consequences.

Our observations have been interesting in pointing out that notwithstanding the progress of preventive medicine and the propaganda of educating the public in personal and public hygiene, a very high percentage of preventable conditions appear in the average well born and well reared young adult of the present day.

From the Department of Clinical Medicine, University of Wisconsin,

\*Read at the Sixty-eighth Annual Meeting of the State Medical Society of Wisconsin, Oshkosh, Oct. 7, 1914. While we recognize more fully each day the relation of structural defects and mal-development to disease, and also the importance of occupational conditions, yet the acute contagious diseases and the so-called minor infections, must still occupy our attention in any attempt to improve the general health of a given community.

The prevention of the diseases of childhood is one of the most important factors in public medicine, yet with the advances in school supervision and public health regulations, we find in our list of cases little to encourage us as to the results of such efforts, except in the case of diphtheria and smallpox.

Accurate data have been collected in 5,735 cases in this series, 3,955 being men and 1,780 being women. The average age of the men was 20.5 years, while that of the women was 20.6 years. The average height of the men was 67.8 inches and that of the women 63.4 inches. The average weight of the men was 137.9 lbs., that of the women 122.9 lbs. It is interesting in this to note how nearly the average ages of the two sexes coincide and how nearly the height and weight averages coincide with statistical tables for this given age. Therefore, we are dealing, for the most part, with young adults of normal development.

. In considering the past medical histories of these individuals, the contagious diseases have been investigated first. The results have been uniform during the four years and are interesting because it is found that both the so-called minor contagious diseases (measles, parotitis, pertussis and chicken pox) and most of the major contagious diseases have occurred more frequently in the female than in the male sex as shown by the following percentages:

Measles in men occurred in over 79%, in women in about 92%; parotitis, in men 60%, and in women in about 65%; pertussis, in men 46%, and in women 67%; chicken pox, in men about 40%, and in women over 63%.

These data show first the unusual prevalence and spread of measles in comparison to the other contagious diseases; and second, that to explain the more frequent occurrence of these diseases in women it is necessary to study the home environment of the various students. It was found that the majority of the women came from towns and cities while a large proportion of the male enrollment came from rural districts. Another factor that has suggested itself to us in explaining this greater frequency in women, is that girls, at the age when these diseases are most prevalent are probably housed within doors a greater amount of the twenty-four hours than are boys of the same age, and as the carrier of most of these contagious diseases is probably the nasal, buecal and bronchial secretions, the contact is closer and the girls are more likely to contract the disease. We, therefore, explain this frequency of the so-called minor contagious diseases in the female as being due to environment.

The correctness of this conclusion is further substantiated by observation during the four years of college life. While the proportion of men enrolled in the University to the women is about  $2\frac{1}{2}$  to 1, the ratio of morbidity from these contagious diseases is seven to one. Furthermore, one group, the short course Agricultural students, practically all of whom come from rural districts, and who comprise approximately 10% of the total University enrollment, show 31% of the morbidity from this group of diseases.

In the more scrious contagious diseases we find a history of diphtheria in a little less than 8.5% of the men and in a little over 9% of the women; of scarlet fever in 20% of the men and in about 24% of the women; of variola in 3.69% of the men and in 2.69% of the women.

Here it is seen that in diphtheria and searlet fever there is still a greater frequency among women, while in variola, the men have shown the higher percentage. We explain this latter finding on the ground that vaccination is more prevalent and better supervised in the towns and cities.

The low percentage in diphtheria and variola as compared with the other contagious diseases is remarkable, due, we believe to the practice of immunization of exposed individuals in vogue at the present day.

We find a history of typhoid fever in 8.55% of men and in 7.92% of women. We believe that this proportion is due to the fact, as suggested by many observers, that this disease is prevalent in rural districts to a much greater extent than is commonly supposed. The surface well and springs.

having no routine supervision, offer exceptional facilities for the spread of this disease. Physicians of the rural districts should be on the alert to recognize typhoid fever in apparently hygienic surroundings and the immunization with typhoid vaccine of those exposed to the infection.

In pneumonia the proportion (10%) is about equal in the two sexes due, we believe, to the prevalence of the pneumococcus in all communities and the lessened resistance of the human organism to this infecting agent after the first decade of life. It is interesting to note the high percentage of this disease in this series of cases, which gives added evidence of the necessity of making this a reportable condition. It is also worth noting that the different activities and environment of the two sexes make no appreciable difference in their susceptibility to this disease.

In considering a group of diseases that may be brought under one classification on account of their causative relation to common sequellae viz., tonsilitis, rheumatism, and chorea, it is found that the preponderance is again in favor of the female in the ratio of about 3 to 2 (tonsilitis in men 28%, in women 42%; rheumatism in men 10%, in women 15%; chorea in men 0.45%, in women 1.40%). The statistics on tonsilitis are undoubtedly low, as it is probable that only those attacks which have produced constitutional symptoms have been considered worthy of the name of tonsilitis by the patient in giving his history.

The importance of the past medical history in the consideration of a given ease has always been recognized, and due weight is given to the causative relation between the contagious diseases and chronic lesions of the organs of special sense and of the serous membranes. Clinical observation indicates that measles, for example, is followed by mucous membrane changes, while scarlet fever toxins are more apt to produce inflammation of serous membranes. In considering the pathologic conditions discovered in this series of cases, it is interesting to note a distinct relation between the curve of contagious and infectious discases and the eurve of conditions recognized as sequellae to those diseases. For example, chronic endocarditis was present in 5.90% of women and only in 2.91% of men or a ratio of almost 2 to 1. Chronic otitis media was found in 2.58% of the women, and in only .71% of the men, or a ratio of 31/2 to 1.

It will be seen, therefore, that there is a fairly constant ratio between the morbidity curve in the

past history of this body of individuals and the clinical findings of pathologic processes which greatly interfere with their effectiveness in life; this clearly points to the necessity of increased efforts on the part of the medical profession to prevent those conditions, which, while they may have only slight bearing upon the mortality curve, certainly interfere with the full development of the human race.

It is of interest to note other clinical findings which we believe greatly interfere with the proper development of the young adult. These are mainly skeletal deformities, some of which may be congenital but, for the most part, are secondary to disease early in life. Here again the preponderance is in women. Under the heading of skeletal abnormalities we find 40% in women compared with less than 30% in men. In studying these abnormalities we must divide them into three groups: those congenital in origin, those secondary to habit and environment, and those secondary to disease. It is this latter class that has interested us particularly, and the percentage of these defects has been 9.3 in women and 4.75 in men. Among this group, one worthy of mention that has had special bearing on the individuals' mental development is malformations of the maxillae. As so much more satisfactory results from the correction of this defect can be obtained at an earlier age than that with which we are dealing, it seems particularly fitting to make special mention of it. We feel that this mal-development is secondary to improper breathing early in life, and is almost always associated with adenoids. We, therefore, believe that it is just as important for the physician to correct the adenoid deformity early in life as it is to remove the adenoids themselves.

The percentage of nasal and naso-pharyngeal defects found in this series, 58% in men and 57% in women seems remarkably high, but in the study of the same cases during their University course we have been able to demonstrate that these individuals are particularly predisposed to acute infection of the upper respiratory tract.

As is well known, the presence of enlargement of the thyroid gland in this section of the country is high and that women are more frequently affected than men. In this series, visible and palpable enlargement has been observed in 24% of men and 48% of women. As yet, our studies have been too incomplete to draw any deductions from these statistics.

. Carious teeth have been found in 10% of all men examined and in 2% of women. The marked difference in the two sexes, we believe, is due to the aesthetic desire of young women to be presentable.

Abnormalities of vision have been found in 50% of men and in 48.5% of women. About half of this number have been properly corrected before entering the University, a number of these defects are so slight that they do not have any appreciable effect on the individual's health, and about 15% reach this age with defects that need correction and have never before had their vision tested. This particularly points to the need of more careful medical supervision in the public schools.

Pulmonary tuberculosis was discovered in .4% of all cases examined, including arrested or quiescent cases. The difficulties of discovering tuberculosis at a single routine examination must be emphasized. Our statistics of morbidity during the four years of University life show that tuberculosis was found in .34%, outside of those advised to withdraw at the time of registration.

Of all students examined 24% showed no evidence of previous successful vaccination. In view of the fact that during the eighteen months ending last July, 4,376 cases of small pox were reported to the Wisconsin State Board of Health, it seems proper to call the attention of the medical profession of this state to this important matter, and urge hearty co-operation between school inspectors and family physicians in striving for the highest prevention possible—universal vaccination. Our observations lead us to believe that students coming to the University from without the state are more apt to be vaccinated than Wisconsin students.

The results of the summary of the family histories of the two sexes, as would be expected, does not vary to any extent. About 8% of all cases give a family history of tuberculosis, 8.7% of renal disease, 10% of cardiac disease and 5.3% of neoplasms.

In all these statistics it is well to remember that we have taken into consideration morbidity and not mortality percentages.

In conclusion we would urge:

1. The great importance of increasing our efforts along the line of preventive medicine not only so far as mortality is concerned, but of mor-

bidity as well; not only from the public health standpoint but also in the case of the individual.

- 2. More careful and wide-spread medical supervision of school children from the primary grades through the high school, and that special efforts be directed to reach those attending schools in rural districts.
- 3. More systematic effort on the part of the family physician to point out the sequellae which may incapacitate the young adult from developing mentally and physically, if diseases popularly considered mild are not prevented or at least placed in the hands of a skillful physician as soon as they occur.

#### DISCUSSION.

Dr. A. W. Gray, Milwaukee: I think we will all agree that this program of social medicine that we have been listening to this afternoon, is one of very great interest, and that this particular paper is likewise one which opens up a very interesting field for discussion.

It seems to me that Dr. Van Valzah has started a school inspection of a very peculiar and unusual kind, in that the examination of university students is school inspection in retrospect. At that time of life we are looking back upon the errors and the neglect of early years.

I do not believe that Dr. Van Valzah really meant to criticise school inspection in the state of Wisconsin as being deficient, as shown by the results in the case of University students, because school inspection in the state of Wisconsin is too young to be held responsible for the defects in the young adults of university age. But he could and does very properly point out the fact that school inspection is going to be put on trial by very careful examination at a time of life when school inspection will show up its defects, which is at the time students enter the University of Wisconsin.

Dr. Barth, who follows me in the discussion, will, of course, give us his opinion as to whether school inspection is actually going to prevent the sequelae of the medical inspections that Dr. Van Valzah speaks of.

By implication there is, of course, a certain indictment of the medical profession in Dr. Van Valzah's paper. I suppose if we have a number of indictments of the medical profession, we could stand another without much sorrow. At any rate, I would call the attention of general practitioners and especially those who are complaining more or less frequently that the medical profession is overcrowded, to the fact that there is in a word a gold mine in this particular field, which is neglected at the present time by the general practition-

er. Undoubtedly a great many of these young adults who have come to the University have been in the hands of the family physician, who has let opportunities slip by in not correcting the sequelae of minor infections, the elevation of the hard palate, and the many results of the infections of childhood. I think we have failed to cover a field of endeavor which we could cover to our own profit and satisfaction—cover more completely, to our own satisfaction and to the satisfaction of the patients.

The school inspection of the future is to be responsible, undoubtedly, for the prevention of much of disease. We have the right at the present time. I believe, to classify our primary and preparatory schools as the clearing house of disease. I think that all physicians recognize the fact that our work begins to be busy when school children are brought together in the fall, and if we are going to do anything in preventive medicine, we must do our prevention in the schools. They are, as I say, the clearing houses of disease in this day and generation.

Dr. George P. Barth, Milwaukee: The subject of school inspection has been discussed before this Society on several occasions.

Dr. Van Valzah in his paper treats of conditions in practically the adult stage. The care of the child should begin, not in the adult stage, but in the nutritional stage. There is where we have the beginning of true deformities.

In the matter of infectious diseases it is true that a great deal could and should be done to prevent their spread.

In the case of measles the parents unfortunately often do not call in medical consultation, and, I will add, unfortunately the practitioner has gotten into the habit of considering measles a minor disease. It is not a minor disease. Its sequelae are so evident in the examination that we have made of children, that we must take it out of the classification of minor diseases and put it in a class of disease that requires attention from the time of the first symptoms throughout, in order to obtain a favorable convalescence.

In the matter of the major diseases, we see that they run pretty nearly alike among school children. I have here a chart of major diseases occurring among public school children in the last year. We have had quite a number of cases of smallpox, and I may say that at the present time the children in Milwaukee are being vaccinated as rapidly as possible; the state law is being rigidly applied. Where a case of smallpox occurs in the public school, vaccination must be submitted to, or 25 days of exclusion from the school, the public playgrounds, the library, etc. It is unfortunate that vaccination is not compulsory in our state, and I sincerely hope that at some near future time that law will again be put back on the books, making vaccination of children compulsory to school attendance. In the last year we have had 210 cases of smallpox among the public school children of Milwaukee. The number is entirely too large; we ought not to have 10 to say nothing of the 200.

With respect to the physical malformation in the child, these are to some extent due to the physicians and dentists themselves in refusing to take the necessary steps to correct physical deformities; but more particularly are they due to the lack of knowledge among the people as to the effects on their children of these defects.

The whole system of medical supervision, health supervision, and supervision of school children must first be educational, and correction comes very far at the end. We must first educate the people, and then we will get positive and lasting results from medical supervision.

In speaking of eye lesions, Dr. Van Valzah mentioned a percentage, 50 in the men, I believe, and somewhat higher in the women.

From 20,000 examinations in the city of Milwaukee last year, we find that there is myopia present to some degree in 22.4% of children. Observation and study have shown that myopia increases in children from the time of their entry up to the 8th grade, by about 4%. Consequently it will probably be increased still higher.

In malformation of the jaw, there is one thing that we should lay particular stress upon, and that is the correction and care of the teeth. In the examination of 20,223 children last year, gross defects of the teeth were found in 54.38% of the children. This was especially true in that period where the temporary were being replaced by the permanent teeth. And here I want to make an indictment more or less of the dental profession. A large proportion of the dentists will not take care of the baby teeth. That prevents the permanent teeth from coming in properly. I have seen 3 cases where the permanent teeth were almost completely in, and the temporary teeth still present in a large measure. And that, I think, produces to a certain extent the high percentage of malformation of the upper maxilla, and of the interference with free breathing spoken of by the reader of the paper.

Another thing the reader speaks of is the very high percentage of heart lesions. And that leads me to urge that school children, whether in the grammar grade, or the high school, be not allowed to engage in football, cross-country runs, or other strenuous athletic exercises without an adequate medical study and medical supervision. I think this very important, because at the present time the indulgence in athletics of that strenuous character is so general throughout the state.

To make the medical inspection complete, the history of the child should be at the command of any department dealing with that child, from the time it enters the public schools, or even before—let us say from the time the child welfare division takes hold of that child and teaches the mother to feed it; a record of that child should be complete throughout. The University of Wisconsin should be able to go to the High School, to the city containing a high school, or to the public school, and get the complete record of any child entering the University. That record should be complete for the child throughout. One way of getting that is to have state health supervision of school children. And I want to urge everybody here to work to that end. In that

way, by supervising the children throughout the state we can get a healthier and stronger race of people.

Dr. F. J. GAENSLEN, Milwaukee: I should like to hear from Dr. Van Valzah as to whether he has made any study regarding skeletal and musculature conditions of the pupils in attendance.

Human efficiency is marked in a great measure by the perfection of our bodies, and a great deal will depend upon whether the students are in proper physical condition, as to whether or not they will be able to get the most out of their work. The round shouldered student with narrow chest and ribs coming down to a sharp angle, with a very narrow costal angle, has not the chest expansion that he should have, and his attitude will be faulty by reason of that, so that possibly it may have some bearing on the work done. The hollow back is another form which it is important to consider. The condition of the feet, whether they tire easily. The mental condition is influenced quite as much by that as by a good many other things.

I think it would be interesting to note in how far the physical defects present have influenced the general health of the patient.

Dr. A. J. PATEK, Milwaukee: I should like to ask Dr. Van Valzah whether he has made any further analysis of his cases of nephritis which, if I heard him correctly, he said existed in 8% of the cases examined. Nephritis in adolescence is occasionally met with. And many cases of the so-called orthostatic type, the so-called orthostatic albuminuria, are met with which at the time look very serious, because albumen is present in large quantities, and perhaps casts in large quantities. These cases differ in history and in the lack of eause from the ordinary cases of nephritis, and the further course of those cases is so much more satisfactory. I have looked into many of those cases and followed them through to thorough recovery, and I wondered whether the doctor in his large experience has encountered them also, and what analysis he has made of the cases.

Dr. Van Valzah, (closing): In reply to Dr. Patek's question, I believe that Dr. Patek misunderstood me in thinking I put the percentage so high.

In cases of nephritis I quoted only the statistics of the *family history* of the patients. This gave a family history of 8% of nephritis.

Our statistics on albuminuria in the University, and our experience has been exactly that of Dr. Patek, and most of the cases that showed albumen did not show the presence of casts; and subsequent examinations proved that it was in transitory form.

We have also made and tabulated our deformities of the bony skeleton, and in those that are amenable to treatment we have tried to make recommendations to the Department of Physical Training, so that proper treatment can be given them, and they receive credit for the required work.

#### CO-OPERATION OF STATE MEDICAL SO-CIETIES WITH THE UNIVERSITY EXTENSION MOVEMENT.\*

BY ROCK SLEYSTER, M. D.,

SECRETARY STATE MEDICAL SOCIETY OF WISCONSIN,

#### WAUPUN.

An analysis of what the organized medical profession of a state—the state medical society—can do in co-operation with the organized functions of the state, as expressed through the extramural college or extension work, will be, after all, but a statement of how these two activities can aid each other in their common and only purpose of converting special knowledge to the benefit of the people. While the ultimate aim of the two organizations is the same, they are so different in some essentials as to require at this point a moment's consideration of the objects and methods of each.

The University Extension Division is a direct teaching agency—an organization accomplishing its one function in the direct transmission of knowledge to the people. The function of the State Medical Association is two fold. While sensing its responsibility to society as a teaching agency, it aims to benefit the public not only by teaching them direct, but by teaching its own members thru the exchange of experience that they may keep abreast of the rapid advances of scientific medicine and better serve the public. A statement that two organizations so different yet with an ultimate aim so alike can be of mutual help to each other, will stand without argument. How, then, can we co-operate?

#### HEALTH AND PUBLIC INSTRUCTION.

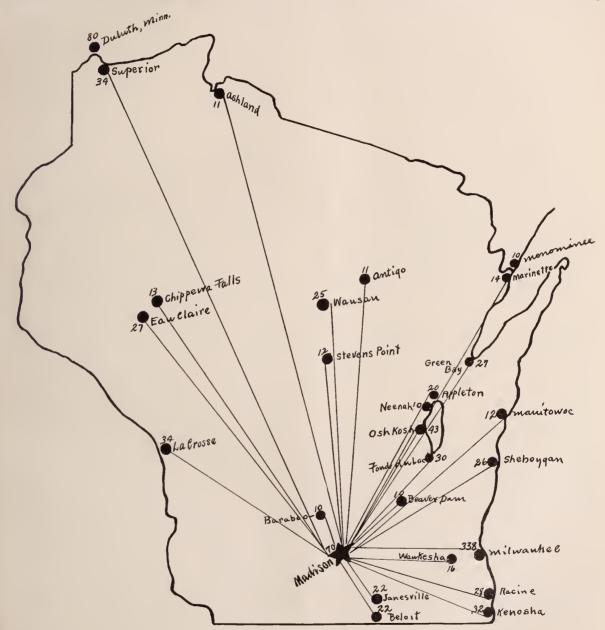
Organized medicine offers no apology for lack of sincerity in its efforts to secure legislation and regulation which would prevent disease and increase the efficiency, happiness and length of life of the people. That the tireless life-time work of thousands of able, earnest and scientific men has not accomplished more is due, not to a lack of enthusiastic endeavor, but rather to faulty methods. I think we have failed to recognize how necessary to any reform is public opinion. It is a curious fact that while today the medical profession is

better qualified and more desirous to work for the prevention of disease than ever before, their efforts are blocked and hindered by an indifference on the part of the public which amounts at times to almost open antagonism. This can mean but one thing—that we have not taken into consideration a perfectly natural and to be expected opposition on the part of the people to restrictions which they do not appreciate or understand-nor have we sensed how necessary is public opinion as the source of social advance. American nature has been taught to rebel at restrictions it does not comprehend Keeping pace with the rapid advances in medicine of the past few years has taxed the strength and capacity of the physician while the people, though evidencing more interest in public health questions than ever before, have been left far behind and are unable to comprehend what we are trying to accomplish. We have been so sure of our position that possibly in our zeal to accomplish results, we have been impatient with the layman, who, lacking the training and expert knowledge, has been unable to estimate the facts presented at their true value. I believe it has been proven that no organization can give to a people a better service than they themselves desire, and that the prevention of disease and the prolongation of life and happiness can only be accomplished through a popular demand for the regulations these necessitate.

The splendid work of Dr. Dearholt, as Secretary of the Wisconsin Anti-tuberculosis Association, and Chief of the Health Instruction Bureau of Wisconsin's University Extension Division, has shown such results as to answer any question as to the practicability of popular instruction in public health matters. The wonderful results he has accomplished almost single-handed, have shown conclusively how eager the public is for information on public health matters, when presented in a manner easily understood. How much greater these results would have been had he been able to secure the active co-operation of the 1,800 members of Wisconsin's State Medical Society can be easily imagined. The medical profession must be made to realize the importance and necessity of public opinion and public demand for the State to protect its citizens against disease. This demand can only be created through the education of the people by just such agencies as are under discussion today. The work of the Health Instruction Bureau of the State University in recasting into popular form scientifie

<sup>\*</sup>Read at the First National University Extension Conference, Madison, Wis., March 13, 1915.

knowledge regarding the cure and prevention of disease, and bringing it to the people through study courses, lectures, exhibits and other means, should receive the hearty and earnest support of organized medicine. A closer working relationship should exist between the State Medical Society, the able aid in the work laid out by the Health Instruction Bureau of the University. Each County Medical Society should promote at least an annual public health meeting, to which the public is invited. These should be alternated in the larger cities in the county, but should have the backing



extra-mural college, and the Council on Health and Public Instruction of the American Medical Association—each aiding the other with moral support, the means, facilities and special advantages and knowledge at hand.

The individual members, and the County Society units of the State Medical Society can render valu-

of the local county society in each instance. The exhibits and lecturers should be furnished by the University Extension Division, but the work of all local arrangements, such as announcements, place of meeting, placing of exhibits, etc., should be assumed by the local County Medical Society. The individual members of the Society, in any

city, should assume as an obligation, any work requested of them, such as making preliminary surveys, or arrangements for any lecture, exhibit, or community institute. With this local help and cooperation, the work of the Extension Division can be facilitated and made more effective. It means, however, a new interest on the part of the medical profession must be effected, through a realization that permanent results can be attained only by an education of the people to demand that which we have endeavored to force upon them. The preliminary work, therefore, must include a campaign of education in our own profession.

#### GRADUATE STUDY FOR PHYSICIANS.

We have considered briefly co-operation in public instruction. As stated earlier in the paper, state and county medical organizations aim at study and mutual instruction as well. Can the medical department of a state university serve the citizens of that state better than by offering to the practitioners of the state through the Extension Division some means of graduate study? Is it not as important to bring the men who are combating disease today, and will be for the next ten or twenty or thirty years, to a high point of efficiency, as it is to train the man of tomorrow? Cannot the organization so carefully selected and equipped to train the soldier of the future be of some service to the man on the firing line today?

For the past ten years the medical profession and the educators of the United States have given the most careful consideration and study to the subject of medical education. The work of the Council on Medical Education of the American Medical Association has resulted in establishing the highest standards for medical schools this country has ever known. It has forced the poorer schools to close their doors and has made a better school of all that remain. Standards have been raised everywhere. But this has all been done in the interest of the public of tomorrow. In preparing the practitioners of tomorrow has the university, whose real aim is to be of service to the community, exhausted its resources and covered its field of endeavor? What of the 140,000 workers of today? These men will bear the brunt of the fight for many years to come. Is it not worth while to try at least to give them a better equipment, to teach them what is being developed in the quiet zone at the rear? Is the experienced soldier at the front to be forgotten in the training of the recruit?

While doubtless work still remains to be accomplished in raising the standards of our medical schools, the problem may now be regarded as practically solved. It seems to me that the work of today is to devise ways and means of improving the knowledge of the practicing physician. Many of these men have received a very inadequate education, and a better training for them is surely as important to public welfare, and should be made as much a function and part of a state educational system, as is the training of those about to enter the profession. The subject of graduate medical instruction has been neglected and relegated to the rear in our enthusiasm to improve our medical schools. The public good as well as the desire of opportunity for a better training on the part of those at work, demands that we now give some consideration to the subject.

There are today various graduate schools, usually independent and varying from good to bad. There is the same necessity for high standards in graduate schools, and the Council on Medical Education of the American Medical Association is now giving this subject its attention. The greater number of practitioners are, however, unable, for financial, business or other reasons, to leave their homes and practice for a sufficient length of time to take up resident graduate work at any of these schools. It is to this class, and it is they who are in greatest need, that the university medical school should reach a helping hand through its extension division. The details of such a plan must be worked out carefully but I see no reason why it should not succeed and the need certainly justifies the effort. Possibly two courses would be required—one of an elementary character for the poorly trained man and one advanced for those who require only the later developments of scientific medicine. I believe the expense could be largely if not entirely assumed by the student, though the public receive the ultimate benefit and any deficit of this character to a state institution would be a splendid investment.

The plan of University Extension Graduate Medical Work would involve correspondence study and lectures with demonstrations or both. Even a beginning would necessitate the employment of full time men especially fitted for the work. This is as true of medical extension as of other forms

of university extension. The faculties of the university medical school would and should co-operate. Leading physicians in private practice should lend a helping hand when ealled upon. Non-medical members of the university faculty would often lend an interest and value to these courses, for the average general practitioner is not apt to have his attention sufficiently called to the broader aspects of social problems and economics. Too often have big social movements been met by indifference by the medical man. Laymen have supported where we should have been leaders. Men versed in the newer social movements and tendencies might present these with profit.

The plan of correspondence study through the university extension would be well adapted for the more elementary courses and would care for the isolated physician in the smaller communities who would be unable to attend regularly meetings of a size required to insure a lecturer and demonstra-Physicians in larger centers would need this course as much and could take it in addition to the regular term of lectures. Lecture conrses and demonstrations could be conducted under the auspices of those County Medical Societies in whose territory there is a city with a sufficient number of members to form a profitable class. A regularly planned and well laid course of study covering a period of winter months would be the ultimate ambition of such a plan. Such talks and demonstrations should be thoroughly practical and should be illustrated by lantern slides, moving pictures, etc. The lecturer might even spend a few days in the larger communities, sufficient to demonstrate, say, the newer laboratory technique, new apparatus, new methods of diagnosis, treatment, etc.

For the purpose of touching briefly on the practicability of graduate medical study under the University Extension plan, I have made a hasty survey of Wisconsin. I believe this to be a fair example, for, while many of the western states would present greater difficulties, there are few states east of the Mississippi, but would be less handicapped by distances and geographical distribution. Wisconsin has, I believe, but twenty-two cities above eight thousand, eighteen cities above ten thousand, and fifteen cities above fifteen thousand inhabitants. Fifteen of the twenty-two above eight thousand, and thirteen of the eighteen above ten thousand are situated in the southeast one-third of the State. This leaves two-thirds of the State with

rather long distances to cover, by means of a lecture course, though I believe it by no means unfeasible.

On the accompanying map I have designated in solid circles the cities that have ten or more physicians already organized as members of their county medical society, and who shall be, as a rule, easily available for class instruction, and in sufficient number to warrant the undertaking. twenty-five cities in the State with ten or more available members, of which number seventeen are in the southeastern third, each but an hour or two apart if taken in succession. There are in the State fifteen cities having twenty or more members, of which number eleven are similarly located. With this number of prospective classes, nearly all within a comparatively short distance of the University, it would seem that conditions justify Wisconsin in initiating a University graduate medical course. If what promises so well here can be carried to a successful realization, one of the big problems of graduate instruction for the busy practitioner has been solved, and many of the other States will be able to carry out the plan with less difficulty than we.

### THE PRESENT STATUS OF NERVOUS SYPHILIS.\*

BY E. M. HAMMES, M. D.,

ST. PAUL, MINN.

To the neurologist, syphilis of the central nervous system has always been a topic of extreme interest. This is especially true in recent years, for the discoveries of Schaudinn, Wassermann, Ehrlich and Noguchi have lead to great changes in the methods of diagnosis and treatment of this condition. For many decades the etiology of cerebro-spinal syphilis has been recognized as the same as that of lues elsewhere. As far back as 1530 Paracelsus wrote an article on eerebral syphilis, while some of the Mexican physicians shortly after the discovery of America made reference to paralvsis of the extremities due to lues. In 1740 an extensive work was published by Jean Artruc. In the second half of the 19th century, Virehow, Heubner, Charcot, Westphal and others published many valuable articles, which are still classical.

<sup>\*</sup>Read by invitation before the Ashland-Bayfield-Iron County Medical Society at Ashland, Feb. 22, 1915.

Not much reference is made in the literature to paresis until 1822 when Boyle recognized this disease and separated it from other mental disorders. The works of Romberg in 1858 and of Duchenne in 1863 made tabes a clinical entity. And at the present time, among the organic nervous diseases, tabes looms up like a giant both as to its manifold symptomatology and its frequency of occurrence. Until very recently tabes and paresis were classed as post-syphilitie diseases. The exclusive syphilitie etiology was disputed by most authors for the following reasons: first, in about 10% of the cases of tabes and paresis no syphilitie history was obtainable; second, the anatomic pathologie findings of tabes and paresis are entirely different from those of cerebro-spinal lues or lues in other organs; third, the inability to combat these diseases with anti-syphilitic treatment; fourth, the relative infrequency of tabes and paresis in comparison to syphilis. According to Raumont, only 1.1% of all syphilities develop tabes. His report is based on a study of 3,600 leutic cases.

In 1905 Schaudinn and Hoffmann announced their discovery of the Spirocheta pallida in the primary lesions of syphilis and in 1906 Ranke found the spirochetes in the pia and blood vessels of the brain cortex in a child with hereditary syph-Six years later Noguchi demonstrated the spirochetes in the brain cortex of pareties and in the spinal cord of tabeties. The following year Graves of St. Louis inoculated rabbits with blood from pareties and produced typical syphilitie lesions in the testicles of these animals, and found the living spirochetes present. Many other observers have reported similar findings in the brain and spinal cord of pareties and tabeties. Thus it has been conclusively proven that the active Spirocheta pallida is the cause of these diseases. Etiologically speaking we are dealing with one disease only, nervous syphilis, and the symptoms manifested are only an indication of the location of the lesion. Nothing of note has been added in the past years in the symptomatology or pathology of these diseases. The advance made in the cytobiological and eliemical study of the spinal fluid has placed the diagnosis of these conditions on a more scientific basis than any other group of organic nervous diseases.

The Wassermann reaction according to the Hauptman method has been found positive in the spinal fluid in almost 100% of the cases of paresis

and tabes, while in cerebro-spinal lues, it is positive in about 90%. In the blood serum, the Wassermann reaction is positive in paresis in about 100% of the eases, in tabes from 60 to 70% and in cerebro-spinal lues from 80 to 90%. We have found an excess of globulin in almost all cases of syphilitie infection of the central nervous system. We use both the Noguehi butyrie acid-sodium hydroxide test and the Nonne neutral ammonium sulphate test with every spinal fluid. An increased lymphocytosis has been found in about 90% of these cases. For the estimation of this count we use the Fuchs-Rosenthal counting chamber. cell count about 8 per cu. mm. is considered pathologie. Increased lymphocytosis occurs frequently in other conditions such as multiple sclerosis, tubercular meningitis, etc. It is simply a manifestation of a chronic irritation of the meninges, and ean occur in any disease where this condition exists. The usual cells found are the large and small lymphoeytes and the plasma cells.

The results obtained from the Lange colloidal gold test of the spinal fluid of luetics are very interesting. In paresis and tabes, the colloidal gold curve has been quite typical while in cerebrospinal lues the curve has not been as definite or as constant. The spinal fluid in tubercular meningitis also gives a characteristic colloidal gold curve, and is a valuable aid in differentiating this condition from other similar diseases.

It might be of interest to quote a few cases to show the value of these tests.

Case I. Female, 21 years old, single, domestic. Family history negative. Personal history negative, except an appendectomy in 1911. Besides this the patient states that about two years ago she had a sore on her hand, which the doctor pronounced a gonorrheal infection. Lues denied. The present complaint began about January 10, 1915, when the patient developed an abscess on her right thumb which was very painful. This continued to suppurate slightly for one week, and on January 17th the abscess was lanced and drained. The evening previous, the patient developed severe headaches and shortly afterwards had a general convulsion. She had another one on January 18 and her headaches have been constant since then, mostly frontal and bilateral. I first saw her January 19, when she complained of severe frontal headaches, and appeared somewhat drowsy and eonfused.

The physical and neurological examination at this time was negative except for an abscess on the right thumb which was draining freely. The temperature was around 100° for two days and then gradually became normal and has remained so. The pulse varied between 75 and 100. Leucocytosis 12,200, blood pressure 122. Urine normal. A diagnosis of metastatic involvement of the brain following the infection of the thumb was suggested. During the night of January 19 she had ten major convulsions and in the forenoon of January 20 she had at least twenty more and it seemed as if she would pass into a status epilepticus. These convulsions were Jacksonian in character, beginning with spasms of the left face, while the eyes were rotated to the left and upward. This spasm soon involved the left arm and leg, after which it became generalized. In an interval between convulsions on January 20, we performed a lumbar puncture and drew off about 8 c. c. of clear spinal fluid under pressure. This gave positive Nonne and Noguchi tests, a lymphocytosis of 12 per cu. mm. and a positive Wassermann. The colloidal gold curve was not characteristic in any way. The Wassermann in the blood was also positive. The neurological examination at this time gave a bilateral Babinski and a mild optic neuritis, more marked on the right side. The Babinski on the left side disappeared but on the right side was still present one week later. All the other neurological findings were negative. A diagnosis of cerebrospinal lues was made and the patient at present is doing nicely under anti-syphilitic treatment.

Case II. Female, age 34 years, single. Family and personal history negative. At a later time the patient admitted that about one year ago, she had been kissed by a man, who about four weeks afterwards developed secondary symptoms of syphilis. She denied any primary or secondary manifestations of lucs.

Present complaint, patient was first seen in consultation with Dr. F. A. Rogers, August 20, 1914, and gave the following history: During the past six months there have been indefinite symptoms of general malaise and loss of strength. She had lost about eighteen pounds in weight and had frequent headaches, mostly frontal and occipital. Since August 10 the patient had to remain in the house on account of the severe and constant headaches. During this time she had occasional emesis. During the past few days she complained of di-

plopia and there was a tendency toward retraction of the head. Since August 24 she would develop Cheyne-Stokes respiration when she would turn on the right side. In other positions her breathing was normal. This disturbance occurred almost invariably when she attempted to lie on her right side. Her temperature varied between 99° and 101°, and her pulse was about 120. Urine and blood examination negative.

Neurological examination. Cranial nerves normal except a mild paresis of the right abducens. There was rigidity of the neck muscles and the Kernig sign was quite marked. There was loss of both knee jerks, while the other reflexes were normal. The sensation was normal except a marked tactile hyperesthesia in both lower extremities from the knees down. The background of the eyes was negative. Tubercular meningitis was suspected. A lumbar puncture was done and about 10 c. c. of clear spinal fluid under pressure was removed.

It is interesting to note that immediately following the lumbar puncture the headaches were relieved and the peculiar respiratory disturbance disappeared. The spinal fluid gave the following: Nonne and Noguchi tests strongly positive, 317 lymphocytes per cu. mm., a positive Wassermann, no tubercle bacilli could be found and the colloidal gold curve was suggestive of cerebro-spinal lues, and not of tubercular meningitis. The Wassermann in the blood was negative. A diagnosis of cerebro-spinal lues was made, and under treatment of salvarsan intravenously and potassium iodide and mercury internally the patient made a complete clinical recovery.

There is at the present time almost as much difference of opinion in regard to the value of salvarsan in the treatment of syphilis of the nervous system as there was immediately following Ehrlich's discovery of 606; the spontaneous remissions and exacerbations of all syphilitic nervous diseases make it particularly difficult to ascertain correctly the effect of any form of treatment.

There is no question that salvarsan has been a great benefit in the treatment of syphilis. It is stated in a recent report by W. G. Stimpson, Assistant Surgeon General, that since the introduction of salvarsan in the treatment of syphilis, in the United States Army an average of 13.31 days for hospital treatment per patient is required, as compared to the average of 29.14 days hospital treatment before the use of this drug, diminishing the

average number of hospital days treatment by 15.73 days. According to Rivaut the nervous system is affected in 65% of the cases of secondary lues and this can be demonstrated by a positive Wassermann at times or an increased lymphocytosis or an excess of globulin in the spinal fluid.

In reviewing the extensive literature on the subject of treatment of nervous syphilis three methods seem most in vogue, the intensive treatment, the direct intra-spinous method of salvarsan or neosalvarsan and the intra-spinous injections of salvarsanized serum. Peterson and Stephenson and others have reported some notable results by the intensive treatment. Their purpose was to obtain a cumulative effect of the drug. From the serobiological reduction in their eases it would appear that the natural barrier of the choroid plexus was overcome, and thus a sufficient amount of salvarsan was introduced into the cerebro-spinal canal.

Peterson and Stephenson injected intra-venously 0.45 gm. neo-salvarsan every third day for five injections and on the days the patient received no salvarsan, inunctions of mercury were administered. Their reports show favorable sero-biological reduction and clinical improvement.

In spite of repeated experiences concerning the danger of direct intra-spinous injections of salvarsan or neosalvarsan the method is still in use. The most frequent unfavorable symptoms following the injections are loss of bladder control, increase of the ataxic gait, and marked sensory disturbances of the lower extremities. In several instances death ensued.

Rivaut obtained favorable results with this method. He reports upon nine cases. He injected from three or twelve mg. of neosalvarsan into the spinal canal together with cerebro-spinal fluid previously withdrawn. These were given at intervals of eight days for six injections. At the same time salvarsan was administered intravenously. Favorable results were obtained in five eases (two of syphilitic meningitis, two tabes and one incipient paresis). In the other cases the results were indefinite. The sero-biological reactions showed corresponding improvement.

Marie and Levaditi reported on sixteen cases of general paresis treated by direct injections of from one to six mg. of neosalvarsan. Fifty per cent gave some clinical improvement. Wile used a hypertonic solution of 6% neosalvarsan in distilled water, injecting from three to twelve mg. His

series comprised fifteen patients (seven tabetics, three paretic, three with cerebro-spinal lues and two with tabo-paresis) of these two died, seven showed marked clinical and sero-biological improvement and the remaining six were not benefited. The advantages for this method are, first, the accurate dosage of neosalvarsan administered; second, its simplicity as compared to the more elaborate and time-taking method of preparing and administering salvarsanized serum (Swift and Ellis method).

Our experience with the intra-spinous treatment has been entirely with the salvarsanized serum occording to the Swift and Ellis method. We have given almost 200 injections, and with one exception, a case of aseptic meningitis, we have had no unfavorable reaction. This case was reported in detail by Dr. Riggs before the American Neurological Society in May, 1914.

In Swift's series of tabetics 83% gave a negative Wassermann in the blood and spinal fluid and showed marked clinical improvement. Up to the present time, Dr. Riggs and I have treated 34 patients with the intraspinous method of salvarsanized serum. Our series comprises 20 tabetics, 8 paretics, 4 eases of cerebro-spinal lues, one ease of spastie paraplegia and one ease of syphilitie endarteritis with hemiplegia. In 75% of our tabeties the laboratory tests in the blood and spinal fluid have become normal in every way, and have remained so. All but two cases showed decided clinical betterment such as marked relief of the lightning pains, a practically normal return of the bladder functions, and an improvement in the gait and in the general physical condition. Although four of our pareties showed a favorable sero-biological change and a decided temporary improvement, only two have continued to do so, while the other two have had a return of their mental symptoms.

Cerebro-spinal lues usually responds to the ordinary antiluctic treatment, yet certain cases prove most refractory. We have used the intraspinous method on those patients who failed to respond to the usual treatment. In three of the four cases, there was a general improvement both in the eytobiological and in the clinical condition, while in the fourth case, the blood and the spinal fluid improved, but the clinical picture was not influenced. The case of spastic paraplegia improved decidedly, both clinically and sero-biologically, while the

patient with the syphilitic endarteritis was not influenced in any way by treatment except that there was some general improvement.

The reaction following the intraspinous injection of salvarsanized scrum is usually mild. There is frequently a rise of temperature up to 100° for twenty-four hours. In tabes there is almost invariably an increase of lightning pains for the first twelve hours, after which they gradually subside. Small doses of aspirin usually give relief. Rarely hypodermics of morphine are needed. Only once have we noticed any bladder disturbance. A tabetic was unable to pass his urine for the first twenty-four hours after which he had no further difficulty. Vomiting has occurred several times in our cases of cerebro-spinal lues. In paresis the reaction is particularly mild. Rarely is there an increase of the mental symptoms during the first day.

The following case of tabes has been one of our most satisfactory results, both clinically and sero-biologically.

Case A. Professional man, age 46, single. Family history, father-died at the age of 74 of apoplexy, otherwise negative. Personal history, had the usual diseases of childhood. Uses alcohol in moderation, tobacco to excess, denies veneral diseases and has never had any antiluetic treatment. Had a bladder stone removed February 8, 1914, by the crushing method. Present complaint: In January, 1909, the patient was almost frozen while exposed to severe cold for several hours. A few days later he noticed a numbness in both feet which gradually extended up to his knees. Soon afterwards he developed difficulty in walking, more marked in the dark. For the past four years he has had a constant dull aching in both feet, also occasional attacks of shooting pains especially in the right leg. Since 1911 he has noticed some dribbling of urine at times, which has improved since the removal of the vesical calculus. During the past six months he has developed an ataxia of the upper extremities, especially the right arm. He has lost almost forty pounds in weight since 1908. He eame under our care March 3, 1913. He was in such a devitalized condition, that he could hardly walk a half block. The physical examination was negative. The neurological examination gave bilateral Argyll Robertson pupils, there was marked Romberg, ataxia of both upper extremities, especially the left. There was loss of

knee jerks and Achilles jerks. The superficial reflexes were normal. The muscle sense was impaired in both lower extremities and there was impaired tactile sense in both legs up to the knees. A spinal fluid examination showed an increased pressure, a strongly positive globulin, 27 lymphocytes per cu. mm., a positive Wassermann and the colloidal gold curve was typical of paresis. His mentality was normal in every way, and we made a diagnosis of tabes. He received an intravenous injection of .4 gm. salvarsan and the following day an intraspinous injection of salvarsanized serum, 30 cc. of a 40% solution (Swift and Ellis method.) This was given for eight injections at intervals of from two to four weeks. After the third injection his blood became negative, and after the eighth injection which was given September 25, 1914, his spinal fluid became negative. The colloidal gold curve remained the same. On December 19, 1914,

TABLE I. OF CASE A. TABES.

DATE	Wa	ssermann	nn gig		pho-	ings st	
1914	B'ood	8p. Fluid	Pressure in Spinal Fiuid	Globulin	Lympho- cytes	Fehlings Test	Treatment
3/6	+	+	+++	+++	27	+	same
3/20	+	+	++	+++	26	+	same
4/3	0	+	+	++	24	+	same
4/7	0	+	n	+	14	+	same
5/6	0	+	n	trace	1	+.	same
7/24	0	+	n	trace	5	+	same
8/7	0	O in 1 c.c. + in 1. c.c.	n	trace	1	+	same
9/25	0	O in 1 c.c.	, <b>n</b>	trace	4	+	same
12/19	О	O in 1 c.c.	n	trace	3	+	no treat.

another lumbar puncture was done and the spinal fluid was found normal in every way. The Wassermann in the blood also remained negative. The colloidal gold curve at this time showed a decided improvement. The clinical improvement was very satisfactory. He has gained fifty-one pounds in weight, the ataxia in the upper extremities has disappeared entirely and in the lower extremities is decidedly better. During the hunting season he walked as much as four miles a day without any discomfort or fatigue. Aside from an occasional dull ache in the right big toe, he feels comfortable and he has been free from shooting pains for over

five months. His bladder function is also normal.

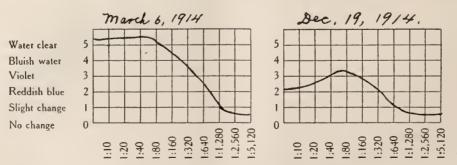
Following each intraspinous injection he had the usual reaction of increased lightning pains and a slight temperature for twenty-four hours. Besides this he would become extremely irritable and fault finding for about forty-eight hours which was absolutely foreign to him at any other time. At each treatment he received .4 gm. salvarsan, and on the following day 30 cc. of 40% solution salvarsanized serum intraspinously.

In the light of our experience we believe that the use of salvarsanized serum in vivo is a safe procedure. The combined intravenous and intraspinous injections produce more satisfactory results both clinically and sero-biologically than the intravenous use of salvarsan alone. However, Sachs, in a recent article on the treatment of nervous syphilis, states that the intravenous injections of salvarsan have accomplished as much for his patients as could be expected from the combined intraspinous and intravenous treatments. He concludes that the improvement is due to the intravenous medication.

In our series there are seven patients who have improved both clinically and sero-biologically under combined treatment, having received very little benefit from the intravenous injections alone. This is in accord with the experience of Ayer.

The question naturally arises, wherein lies the value of salvarsanized serum. Prof. Benedict of the Cornell Medical School made an analysis of ten different specimens of blood which were obtained from 15 to 45 minutes after intravenous injections of salvarsan in order to determine the amount of arsenic present. He was able to detect only from 0.00004 gm. to 0.0001 gm. of metallic arsenic in 20 c. c. of whole blood, and believes that the arsenic is not free in the blood stream but is probably bound by the receptors of the body cells.

Swift and Ellis observed that the spirochaeticidal action of salvarsanized serum was greatly increased if the serum was heated for 30 minutes in a water bath at 56° C. and believed that the heating destroyed some "hindering component" in the serum. Stühmer at the University clinic at Breslau has been conducting some interesting experiments to further determine this question. He injected rabbits intravenously with salvarsan and neosalvarsan, and thus procured his salvarsanized serum. This he introduced into mice previously inoculated with trypanosomes. He found a curative value from neosalvarsanized serum for twenty-four hours, while from salvarsan this could be demonstrated for at least three days and longer. The heating of these sera for 40 minutes in a water bath of 56° C. greatly augmented their value. The mice which received these subcutaneous injections of salvarsanized serum recovered from the infection, while those which were given normal serum or none, died. He used the Ehrlich Bertheim reaction (a color reaction when a salvarsan solution is added to an acid solution of para-dimethylamidobenzaldehyd) as a clinical control and found that it occurred parallel with the therapeutic value of the serum. He arrives at the following conclusions: First, after a single intravenous injection of salvarsan, protective properties against trypanosome infection are found in the blood serum as late as the seventh day and their value corresponds to the intensity of the chemical reaction (Ehrlich Bertheim reaction). Second. It does not seem logical that this is due to free salvarsan but probably to some oxidation products, which by heating are separated from their loose synthetical combination and again become active. It is very difficult to determine if antibodies play any additional therapeutic role in the salvarsanized serum.



Colloidal Gold curve before and after treatment.

#### SPORADIC CRETINISM.

BY A. L. BEIER, M. D.,

ASSISTANT SUPERINTENDENT WIS. HOME FOR FEEBLE MINDED,

#### CHIPPEWA FALLS.

Although the application of the Binet-Simon tests has tended to revolutionize the study of mental defect and created a new classification, still the old nomenclature, especially as applied to certain distinct classes of feeble-minded, has not suffered material change; thus, cretins are still known as such, and constitute a distinct type of mental defectives.

The development of the study of the feebleminded is closely interwoven with the study of cretinism. It might be said that mental defectives received a thorough investigation as a result of the latter condition, and the progress made in the application of training the generally feeble-minded, was almost simultaneous with the progress made in the development of training those afflicted with cretinism. In 1842, Dr. J. Guggenbuhl of Switzerland, a country in which cretinism and goitre were extremely prevalent—one might say, flourished acting on the principles announced by Itard of France, established one of the first schools, which in turn gave fresh impetus to the consideration and the care of the mental defectives generally in Europe as well as in America. M. Saegert established a school at Berlin at almost the same time. Dr. Guggenbuhl at first confined his efforts to the care, training and treatment of the cretins.

Some time previous to Guggenbuhl's venture, in the year 1811, Napoleon I attempted to solve the enigma whose effects scemed to enslave the inhabitants of the goitrous sections of Switzerland, and caused a census of the goitrous and cretinous people to be taken; the enormous number found in certain cantons was surprising. Napoleon, attempting to remedy conditions, desired to remove those afflicted from their unsanitary surroundings to a more healthy environment, but his efforts proved to be in vain, probably, as Dr. Martin Barr suggests, due to the magnitude of the problem.

Dr. Guggenbuhl's experiment proved to be more successful, however; his charges improved under different surroundings and painstaking training, and, for a time, his work received favorable and extensive commendation. This in turn excited the jealousy, hatred and suspicion of other men, resulting finally in his impeachment and condemnation;

he was spoken of as a charlatan and died, truly brokenhearted, in 1863. One could go more deeply into the history of the study of this condition, but time will not permit. It might be well to add that Pliny, Juvenal, Vitruvius and Strabo mention the condition in their writings. Later, in the year 1500, Felix Plater described it again; Wolfgang Hoefer discussed the subject in 1675.

Two distinct forms of cretinism, that however are closely related, are recognized; they are, the endemic and the sporadic types. The endemic form exists in the mountainous districts and the enclosed valleys of Switzerland; in Austro-Hungary; in Germany, Spain, France and Russia; in Belgium it is said to be quite rare; in Great Britain there are a number of localities where it is found; it is also seen in the mountainous parts of Asia and South America; in the past it has been known to occur in North America, in California and Vermont, and, (according to Church and Peterson), in Minnesota and Ontario. It may, however, occur anywhere where goitre is prevalent, but this does not mean that cretinism is necessarily a frequent concomitant of goitre; where cretinism occurs endemically the persons so afflicted come of goitrous ancestry, and are themselves goitrous "in from one-third to two-thirds of the cases" according to Ireland. This author further remarks: "It would appear that the cause which produces goitre alone when it is feeble, produces cretinism when it acts in greater intensity."

In the sporadic cases of cretinism, however, the thyroid gland is either congenitally absent, extremely deficient in development, or atrophied. This circumstance is probably the chief difference between the endemic and the sporadic forms. Both conditions however are dependent on the same underlying principle, namely: an absence, or an impairment, of the thyroid secretion. The adult variety of myxedema too, including both the operative and the idiopathic forms, is dependent on a condition of athyroidez, or hypothyroidea. These different conditions, in all procability, differ only in the degree in which the thyroid secretion is deficient, and the age at which such deficiency of thyrcid functioning becomes manifest. The primal causation may be dissimilar, but the secondary manifestations seen in all these cases, have patent points of similarity. We must, however, give due allowance to the age at which the deficiency of the thyroid activity occurs; thus we would see in the adult variety of myxedema or cachexia strumipriva,

that we have to deal with a deficiency of the thyroid secretion acting on a body that has attained full somatic development; again, in the endemic form of cretinism, we have in all probability, a gradually increasing hypothyroidism occurring during the process of goitre development, and the concomitant decrease in the thyroid glandular elements; whereas in the sporadic form, we have almost invariably either a congenital absence of the gland, or, as will be detailed later, a rapid, early, atrophy of the thyroid and the consequent cessation of the thyroid function, the somatic effect produced con-



CASE I.

stituting the characteristic condition known as sporadic eretinism.

This paper, however, as its title indicates, will deal with the last mentioned condition. (Readers interested in the further consideration of Endemie Cretinism are referred to Dr. Barr's work, Mental Deficiency and Dr. W. W. Ireland's work, Mental Affections of Children.) Sporadic cretinism has been described under different titles: it has been named, Congenital or Infantile Myxedema; Myxedematons Idiocy; Idiocy with Pachydermical Cachexia; Cretinoid Idiocy, and Cretinoid Pachydermy.

Drs. Hilton Fagge and Fletcher Beach were the

first to describe the condition in 1861; Gull described it again in 1873 and suggested that there is a relationship between myxedema and cretinism; in 1877 Ord added to the literature on the subject, reporting the result of two autopsies: he found atrophy of the thyroid, and mucin in the subcutaneous tissues. Kocher of Berne and Horsley of London later experimented with thyroidectomized animals and tried transplantation of the gland.

In 1893, Dr. William Osler becoming interested in the subject, found 11 cases in America. In 1897, due to the interest that his paper aroused, he was able to report 60 cases. In 1900, Dr. J. M. Murdock, Polk, Pa., making inquiries throughout the American institutions for the feebleminded, was able to find only 19 cases. How many could be found now we have not ascertained. Since the beginning of the Wisconsin Home for Feeble-Minded (which includes 2,279 admissions), we have had but three cases under our care; two of these are described later, and are still living; the other died some years ago, and was reported to me by Dr. A. W. Wilmarth.

This type of cretinism is comparatively rare, and locality evidently has no causal relationship in its production. Very little, so far, has been learned respecting its etiology. Heredity, as in other conditions of mental defect, seems to play quite an important role. Consanguinity was found in a case reported by Bourncville, of Bicetre, but in this case both grandmothers were alcoholie, which fact is probably, in and of itself, prima facie evidence of the existence of a "neuronic instability" in them. Dr. Fletcher Beach notes alcoholism in two cases out of eight. Dr. J. Langdon Down ascribed alcoholic intoxication of one or both parents, at the time of conception, as causal; but if such a state were productive of such profound effect on the germ plasma, the condition would probably be more common than it is. Bourneville found alcoholism in the antecedents of three of his twenty-five cases that he collected both in his practice and from literature on the subject. Pulmonary tuberculosis seems an important factor in his cases as he found it occurring very plentifully in the relationship and ancestry of five of his cases. Cancer was noted in four cases; intermittent fever, in three others; a deformed arm, and elephantiasis of the leg in two different cases. Goitre bore no relationship to any of his cases. Neuropathies were very commonly found in the antecedents; among

these, epilepsy, migraine, insanity, feeble-mindedness, hysteria, paralysis and apoplexy were frequently seen. In one of our cases the only item of interest that we could find was that the father had died of apoplexy; in the other, the father had died of paralysis. In still another case that I saw recently with Dr. A. C. Nussle of Chippewa Falls, the maternal grandmother had a large goitre; insanity was found to be present in the father's Different writers mention epilepsy, family. syphilis, tuberculosis, insanity, but such general causes, although they show the effects of a faulty heredity, do not give any clue to the modus operandi of these apparent causes; why any of the conditions mentioned should be productive of insanity or epilepsy in one case, mental deficiency or cretinism in another, is difficult to explain. The relationship of these general causes can readily be seen, but how or why such results are produced is an unsolved mystery. It may be said that all the causes of feeble-mindedness have been ascribed as etiologically capable of producing sporadic cretinism; even mental shock and worry on the part of the mother during pregnancy have been the only apparent factors discoverable in some cases.

Acute infectious diseases have been known to initiate the condition, by instituting an acute thyroiditis with a secondary atrophy of the thyroid gland; such an occurrence is not known to be very frequent, but there have been cases that have developed in the course of the exanthematous diseases and influenza. Dr. Edmund Shields of Cincinnati, reports an interesting case in the New York Medical Journal, Oct. 1, 1898, where an acute thyroiditis arose apparently as a primary condition, and was followed by atrophy of the gland involved. His case was a child ten months of age, who had an attack that lasted about a week; it was accompanied by fever, swelling of the thyroid, and symptoms of pressure on the trachea; no other symptoms were observable; the throat findings were negative; no abscess formation followed (abscess formation is a frequent sequel to acute thyroiditis); the swelling subsided and was followed by complete atrophy of the gland. The child's physical and mental growth ceased, and she developed the appearance and characteristics of a cretin. Her speech was confined to saying a few words. She was finally placed on thyroid extract and improved considerably.

Just what percentage of the cases have had an undiscovered primary or secondary acute thy-

roiditis is impossible to ascertain; it may occur more frequently than we are aware of. The fact that an atrophied gland is frequently found would seem to indicate that an acute inflammation of the thyroid often precedes the myxedema. The condition apparently would be difficult of diagnosis, owing to the usual age of the children affected, and, when associated with some primary infectious disease, it could be very readily overlooked. It is true that the secondary and permanent characteristic symptoms become manifest, in the majority of instances, during the first year of life, usually between the seventh and the twelfth months.



CASE II.

In regard to this however, Bourneville writes: "Generally speaking, it seems that so long as the lacteal alimentation continues, the symptoms of myxedema escape the attention of the parents; it may be because they are absent, or because they are but slightly pronounced. Often they are perceived only after an eruptive fever, convulsion or traumatism. But, we believe, an experienced eye can detect them in the course of the first year if not in the first month of life."

It seems, however, highly probable that an undiscovered acute thyroiditis precedes sporadic cretinism in a large percentage of the cases. It would

probably be wise to at least notice the thyroid gland in cases where the diagnosis seems obscure.

The pathological findings, excepting those relating to the thyroid gland, are of little importance. The thyroid as mentioned previously, may be entirely absent; or, there may be found in its place, a few fatty granules; or, again, there may be complete atrophy of the glandular substance, and very rarely, I believe, a goitre exists, but in such cases the gland shows cystic degeneration, with the glandular elements almost entirely replaced with fibrous connective tissue. (Rotch's Pediatrics.)

The osseous system shows signs of delayed ossification; the fontanelles and cranial sutures are generally open until an advanced age; furthermore, there is a disproportionate development of the body due to the delayed growth of the bones, causing frequent deformities, as crooked limbs, shortening of the long bones, enlarged epiphyses, elongated thorax and a flattened chest.

The characteristics of the sporadic cretins may be grouped under two headings: the physical and the mental. The former are chiefly referable to the stature, the head, the abdomen, the osseous system, and to the integument. Each will be considered in its turn.

Sporadic cretins resemble each other very closely in appearance, so much so that Bourneville suggests that when one case is seen, one sees them all. They are all dwarfed in stature, rarely attaining a height of 5 feet. One of our cases was 2 feet 11 inches when he came to us; no record could be obtained of the height of the other. Even when 5 feet in height, they have the appearance of being stunted owing to the disproportionate size of the head to the rest of the body. The head is large and brachycephalic; in some cases markedly flattened over the vertex; in one of our cases it is slightly cone-shaped. The occiput is usually normally prominent; the lateral surfaces seem spread out; the base of the skull is square and asymmetrical. The forehead is low, narrow and receding; the lateral halves are marked by a superficial depression on either side.

The hair is coarse, dry, quite profuse, but areas of baldness are sometimes met with in some few cases. The nose is usually broad, almost pugshaped; the bridge is depressed or flat; the nostrils are prominent, distended and slightly flaring. The eyes are of normal proportions, but set far apart; strabismus is infrequent, but blepharitis is common. The eyelids are puffy, pale, and appear

edematous; this, however, is not due to a true edema, but is occasioned by a deposit of fatty substance as will be described later. The mouth presents an enlarged tongue, seemingly too large to be correctly confined in its natural enclosure, and is affected with a chronic inflammation. Furthermore, the teeth are often carious and irregularly implanted. The final dentition occurs rather late, and may not be completed until an advanced age. The lips are usually full, thick, and apart. The cheeks are full and sometimes swollen, due again to a deposit of adipose tissue. The ears are usually large, but not always abnormal, sometimes, however, presenting degeneracy stigmata. The chin is small, but quite normal in appearance, and frequently is the seat of small fatty tumors which constitute the double chin seen so often in these cases. The neck is short, thick, and often presents these same swellings described above on its lateral aspects. The thyroid is usually absent.

The abdomen is large, tumid, pendulous, and is also the seat of fatty accumulations; occasionally one sees the lower part thrown up in a coarse fold. Umbilical hernia is often seen. (One of our cases has a small hernia and the one seen with Dr. Nussle also has an umbilical hernia.) The genital organs are infantile in development: the testes are very small and late in descending; the menses are frequently absent, and if present, are scant and irregular, appearing usually very late. The sexual appetite is usually absent; masturbation practically never occurs. Happily these cases are usually impotent.

The osseous system has been described above. The hands are large (some authors say spade-like), and the fingers are short and stumpy. The feet correspond in appearance to the hands. Frequently both feet and hands are cyanotic.

The skin is characteristic: dry, coarse (pachydermical), wrinkled, dusty in color, and is easily separable from the underlying muscles. It is especially scaly about the distal ends of the extremities, and about the scalp. The subcutaneous swellings mentioned before are especially found in the axillae, the supra-clavicular fossae, and in the cervical and abdominal regions.

The digestion of these cretinous children, although they are gluttonous, is usually good, as they are slow eaters. They are, however, frequently constipated, and this, along with the carious teeth, accounts for the fetid breath so noticeable in these patients. The circulation is poor; the pulse is

slow, sluggish and feeble. The temperature is usually subnormal; i. e. in untreated cases.

The voice is rough, coarse or strident. Speech is always defective, and frequently absent; when present it is usually limited to words of a single syllable.

The power of locomotion rarely develops before the third year; when present the gait is waddling and clumsy; muscular weakness is prominent. The general sensibility is usually normal; the special senses too, are normal in our cases. Some authors, however, state that an absence of the sense of smell and taste is usual. One of our cases even seems to have a hypersensitive olfactory and gustatory apparatus, as he is able to detect very readily the presence of thyroid extract in his food. He seems especially averse to taking any medicine

The mental traits of these children vary with the degree of intelligence present; some of them are merely vegetative organisms; others belong to the higher grades of mentally defective children. As a class, however, they are very observant of happenings about them, and are imitative, playful and comparatively attentive, though their mental operations are extremely sluggish. Their memory for faces seems especially good; they have their "likes and dislikes". They sometimes learn to care for themselves when carefully trained, and the higher types mentally show some capability of being trained in school work. It is said that they seldom shed tears,-my cases, however, are known to have been extremely lachrymose when they seemed to sense an occasion for such an occurrence. They are usually placid, happy, amiable and affectionate, but definitely know when to pout and when to be irritable and stubborn.

The prognosis varies in accordance with the mental status of the case. The higher grades resist disease more readily than their less fortunate brothers. As a class their vitality is poor and they succumb very readily to gastro-intestinal and respiratory diseases, rarely, however, developing tuberculosis. They are as a rule remarkably short-lived. (Although Tredgold mentions an imbecile cretin of the sporadic type who was still healthy at the age of 63 years.)

The diagnosis is comparatively easy, especially when keeping the salient characteristics in mind. There are, however, a few conditions that are sometimes confused with cretinism; among these are mongolism, rickets, hydrocephalus and achondroplasia.

Mongolism has been considered in a previous paper and need have no further mention here. (Wisconsin Medical Journal, Feb., 1915.)

Rachitis has not uncommonly been confused with cretinism; i. e. the latter condition has often been mistaken for the former. Here one need only mention the characteristic beading of ribs; the peculiar rhacitic head; the symmetrical enlargement of the epiphyses, in contradistinction to the typical cretinous facies; the absence of the thyroid gland; the presence of various deposits of subcutaneous fat, and the characteristic appearance of the skin.

Hydrocephalus needs only a passing mention; the head is characteristic; the only points of resemblance probably are the marked hebetude and the musclar weakness to which both types are subject; the other symptoms of cretinism would seem to preclude any possibility of error.

Achondroplasia should not give any difficulty in a differential diagnosis; true, the child so afflicted is dwarfed in stature, has, however, a characteristic shortening of the long bones, and is, moreover, invariably bright mentally, in contradistinction to the mental stupor of the cretin.

The form of endemic cretinism need give no difficulty; it occurs where goitre is found endemically. I do not believe that this type of cretinism is to be found in America now. However, the sporadic form may be distinguished from the endemic type by the absence of a goitre which is nearly always present in the latter condition; moreover, the finding of various deposits of fat, pseudo-lipomata, as some call them, would establish a conclusive diagnosis. There are besides this, minor shades of difference that need not be discussed here; it might be well to mention that we have delayed essification in the sporadic form, while premature ossification with its resulting characteristics, obtains in the endemic type.

Knowing that the condition is due to an absent or defective thyroid secretion, an administration of some form of thyroid extract is indicated. The results of such treatment have, in some instances, been truly wonderful; in others, the effect has not been so pronounced, yet, in all cases treated, some degree of improvement has been noticed. Dr. J. M. Murdock says. "The history of thyroid treatment of sporadic cretinism is the record of one of the most brilliant triumphs of modern medicine,"

—in fact, we might add, was the stepping-stone to the development of organotherapy, which, though advancing rapidly, is still in its infancy.

After Sir William Gull, Horsley and others had demonstrated the close relationship of myxedema and cretinism, and had shown their dependence on thyroid insufficiency, experimental measures were soon taken, resulting, first of all, in the transplantation of a healthy thyroid in the peritoneum; this, however, did not give good results in a large proportion of the cases—(thyroidectomized animals were the first to be subjected to experimentation,)-probably due to the fact that the implanted thyroid soon underwent a process of atrophy; following this method of procedure, it was found that as good, if not better, results could be obtained by a subcutaneous injection of the expressed juice of the thyroid body; this too was found to be more or less inconvenient, and it was discovered that the feeding of the whole gland gave the desired results. Soon after a glycerinized extract was substituted, and finally the dried gland in the form of a tablet of definite dosage was employed which has proven to be adequate and serviceable.

The results of thyroid administration in cases of sporadic cretinism are sometimes remarkable: the abdomen loses its tumidity; the deposits of subcutaneous fat gradually disappear; the tongue decreases in size and finally recedes into the buccal cavity; the skin loses its characteristic, pachyderinatous condition; there is usually some increase in height; growth is sometimes so rapid as to cause deformities; the mentality improves in the great majority of cases; the child becomes more alert, playful and active. Where the condition is discovered very early and treatment instituted, it is sometimes possible to obviate the degenerative nervous and mental process that will definitely supervene if left untreated. Where the child is seen later, with mind and body almost totally undeveloped, the condition is nearly hopeless, and even though treatment produces marked changes, still normality will never be attained. These cases, in order that truly beneficial results be obtained, and in order to save them from hopeless idiocy or imbecility, must be diagnosed early and receive appropriate treatment that will supply the economy with the requisite element that promotes both mental and physical growth.

In respect to the treatment: it is necessary that it be continuous in order to be effective as its sus-

pension is rapidly followed by a relapse to the original condition; again, it is wise to begin with a small dose of the thyroid extract; Tredgold very briefly sums up the treatment when he says: "Usually for a child from 3 to 6 months of age, a dose of 1/2 grain once or twice daily will be found appropriate. This must be gradually increased at the rate of 1 grain per diem for each year of the child's age, with a maximum of 15 grains." Care must be exercised that symptoms of intoxication do not develop. The signs that indicate intoxication, are, a rapid, thready pulse. flushed face, rapid rise in temperature, diarrhea, at times vomiting, exhaustion and sometimes collapse. When such signs become manifest the administration of the thyroid must be discontinued for some time, and then gradually resumed. By increasing the dose carefully, however, such symptoms are not very apt to develop. There is really no definite rule to be guided by, as each case constitutes a problem as far as treatment is concerned, and is able to tolerate a certain amount of thyroid, an increase in which will be invariably followed by symptoms of intoxication.

Dr. W. W. Ireland reported two cases of Dr. John Thomson's of Edinburgh, to the Journal of Psycho-Asthenics, in 1904. Both cases were diagnosed and treated early. The first, a child two and a half years old, had been on treatment since early infancy and had improved remarkably. second case was a child who had been on treatment since seven weeks old. Commenting on this case Dr. Ireland says: "Her intelligence is about normal and she fairly might be said to have been saved from idioev by Dr. Thomson's skillful diagnosis and treatment." Tredgold, in his work, Mental Deficiency, reports another case of Dr. Thomson's: "Another case was started upon thyroid at the age of seven and a half weeks, and now, at the age of six and one-half years, is of normal appearance, somewhat above the average height, and, although not very energetic, appears to be of normal intelli-(This case seems to be identical with that reported by Dr. Ireland-Dr. Tredgold probably saw it a number of years later.) Other cases are reported where the diagnosis was made early and treatment begun, with but little mental impairment noticed as the children advanced in age. Some few cases that are reported received but very slight benefit, in others the effect on the growth was more apparent, the mentality remaining practically stationary.

Transplantation of the thyroid gland has been frequently tried but without permanent beneficial results. Kocher of Berne has tried implantation in the bone-marrow, the peritoneal cavity, the omentum, and in the capsule of the spleen. He found, however, that a single transplantation was not sufficient and, "that new material must constantly be supplied either by the administration of thyroid preparations, or, by multiple transplantations." Eiselberg of Vienna reported improvement in a case of myxedema where repeated transplantations had been made. Payr of Leipsic reported a case of congenital cretinism with complete idiocy and had "an astonishing and unprecedented improvement lasting for two years and four months." This was followed by a complete retrogression and evidently absorption of the implanted body. Payr furthermore recommends that for an early and positive diagnosis an exploratory incision be made in the region of the thyroid to show its actual condition; the incision could then be utilized for an implantation of a thyroid body, if the findings warranted such a procedure. Other observers, as Schaak of St. Petersburg, Muller of Rostock, Enderlen of Wurzburg, agree that the effects of a transplantation are not permanent on account of the fact that the implanted tissue will not maintain its function and life for a great length of time. In their experience the effects did not continue for a longer period than two months. (Berlin Letter, Jour. A. M. A., June 6, 1914.)

Voronoff reports a case in the Bulletin de l'Academie de Medicine, Paris, (abs. in Jour. A. M. A., Aug. 29, 1914), where he had grafted the right lobe of the thyroid with its parathyroids, taken from a baboon. The transplantation was made in the neck of a patient who had developed myxedema after an attack of measles. The graft was "embedded in a vascular region and was sutured closely to the surrounding tissues in order to promote adhesions and formation of new vessels." Voronoff states that six months afterward the patient had lost the characteristic myxedematous condition, and that, whereas previously he had been apathetic and stupid, he now became lively and unruly.

I am appending an abstract taken from a report from our Case Record, but will not attempt to give a detailed description of Case 2, nor of that seen with Dr. Nussle, as both are too similar to the described case, (Case 1), to possess any particular item of interest. J. M., (Case 1), was born May 26, 1895, in Wisconsin. His father was born in Vermont, his mother in Wisconsin. The father died of "Paralysis", the mother still lives. No other data concerning the ancestry could be obtained.

J. M.'s peculiarity was first noticed when he was one year old; he did not seem to develop mentally. It is asserted that he learned to walk when he was two years old; entered the Wisconsin Home for Feeble-Minded when 14 years of age. His height then was 35 inches; weight, 36 pounds. The history does not indicate any administration of thyroid extract before he came to the Wisconsin Home.

The physical examination elicited the following items of interest: hair, scant and coarse; integument generally was noticed to be rough, especially about the hands and feet, where it appeared to be scaly, and dry. The extremities were found to be cold and cyanotic; the circulation was evidently poor, the pulse weak and flabby. The temperature was subnormal. The tongue protruded from between his teeth; the teeth showed signs of caries and some were irregularly implanted. The tissues about the eyes appeared to be edematous, but did not pit on pressure. The lips were full and thick. The bridge of his nose seemed nearly wanting; the abdomen was tumid and pendulous. There was no evidence of the presence of a thyroid gland. Pseudo-lipomata were found in the supraclavicular fossae. Mentally he was very dull and apathetic; no speech. The power of locomotion was absent,

He was placed on treatment, thyroid extract, gr. 2, Jan. 20, 1910, and the dose was gradually increased. Soon after, although unable to walk, he could support himself in the upright position if allowed to grasp a chair or some other support. He began taking considerable interest in the happenings about him and appeared much brighter than usual; laughed readily, and took evident delight in being noticed. Cried when irritated, became mischievous in a small way and began to play.

March 3, 1910, J. M. brightened up considerably and enjoys himself piling up blocks, rolling about the floor, manifesting a greater activity than heretofore. His skin has grown to be more soft, and his hair has not the feeling of coarseness as before treatment was begun. The scaliness and cyanosis about his extremities disappeared. He is able to stand better and sometimes moves or rather walks along the edge of a bed or bench, and even pushes a cart before him about the room. He notices

happenings much more keenly and is more easily amused. He is quite sensitive to pain and responds to irritation much more actively than usual. He cries readily and is inclined to stubborness.

So far he has gained 4½ inches in height; his weight is 37½ pounds. No further improvement has been noticed so far, excepting that recently he has learned to partially dress himself, and is trying hard to talk. We have been compelled to withdraw the administration of the thyroid extract frequently owing to the severe diarrhea and other signs of intoxication that he develops. He is now receiving 8 grains of the thyroid extract daily. He has been free from symptoms of intoxication since Jan. 3, 1915.

Case 2. A girl 19 years of age. Breasts are unusually large for a cretin, menstruation began when about 18 years old. She ranks in the middle grade imbecile class. She has the characteristic signs of cretinism; the thyroid gland is not palpable.

#### Measurements-

Height52	in.
Circumference of the head	in.
From glabella to occiput, with tape14	in.
The binauricular arc14	in.

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#### A PLEA FOR THE CORRECTIVE AND COS-METIC SURGERY OF THE NOSE.\*

#### BY FRANZ PFISTER, M. D.,

PROFESSOR OF DISEASES OF THE EAR, NOSE AND THROAT,
MARQUETTE UNIVERSITY SCHOOL OF MEDICINE.

#### MILWAUKEE.

It the latter part of this last spring I had two cases which stimulated in me the desire to in the future pay more attention to a part of our specialty that perhaps has been more or less neglected by most of us. There may have been one or the other of you who has been doing this work and I know for sure that at least one of our guests has already acquired a reputation in this particular field. And right here let me say that this is one of the reasons why I present this short, entirely unpretentious paper. I wanted Dr. Beck to give us first hand information in regard to his own experience along this line.

One of those two cases referred to was a gentleman 42 years of age, of the so-called better class, who consulted me for a very large perforation of the septum of several years standing, the size of a twenty-five cent piece or larger. It extended from about 3 cm, from the outer end of the septum back through the cartilage and included part of the perpendicular plate of the ethinoid and part of the vomer. It did not reach up entirely to the upper end of the septum and there was no indication of a saddle nose. The usual crusts and small denuded areas were present, but no sign of an active ulceration or breaking down of tissue. The patient gave a clear history of lues dating back about twenty years, but could not tell exactly how long the perforation existed. He complained bitterly of the discomfort he had from the crusts, from the occasional bleeding, and the fear that people might actually see the hole in his nose and suspect the cause.

He was going to have something done at all events, in spite of the fact that he had previously been told the opening was too large to be covered by a flap.

I realized that it was impossible to do the usual operation suggested by various writers, namely the shifting of flaps from the septum proper, also that the Marschick operation—taking the covering

<sup>\*</sup>Read at the First Annual Meeting of the Wisconsin Eye, Ear, Nose and Throat Specialists, Oshkosh, Oct. 8, 1914.

from the intact part of the septum, including the muco-periosteum from the floor of the nose,—would not give the desired good result. The fact that on the right side he had an enlarged, rather pendulous inferior turbinate, made me think that if I took the covering of the lateral wall of the inferior meatus and dissecting upward the muco-periosteum of the anterior portion of the inferior turbinate bone, removing the bone of the turbinate for a corresponding distance back, I would get a very large flap, the lower end of which I could hang up on the septum above the perforation.

Explaining my intentions to the patient I found him only too willing to have the operation done and to assume the risk for same. I proceeded as indicated above and was surprised at the large size of the flap. After the dissection of the flap, I refreshened the upper half circle of the perforation, lifted the lower end of the flap to the roof of the nose against the septum and anchored it with two silk through and through stitches, not severing the flap from the outer wall of the nose. This gave the flap the appearance of a hammock, the raw side of the tissues on the under, convex side. I used strips dipped in bismuth paste to lightly pack above against the septum, and a loose packing of sterile gauze beneath the flap to stop bleeding. After removing the lower packing the following day and the upper the second day, I noticed that my flap "stuck". On the third day I re-freshened the lower half circle of the perforation, cut the flap near the outer wall and adjusted it to the opening in the septum, completely covering same. Packing now between septum and outer wall I waited two more days after which I had the pleasure to see my flap united with the septum and the remaining part of flap fairly well covering the outer wall of the nose. Considerable after-treatment was necessary, especially in the other nostril where crusts kept on forming for some time, but the hole was covered to my and the patient's great satisfaction.

This operation could be improved upon by covering the whole or part of the raw surface of the other side with a similar flap from the other side in a second operation. This would have been more than I wanted to do or most patients are willing to stand for.

My patient is exceedingly happy and grateful.

In the second instance I was dealing with a deflected septum and a very marked deviation of

the external nose to the same side as the septum pointed. The patient was a young girl who was much annoyed by the appearance of the nose and her looks were made worse because she was a mouth breather on account of the nasal obstruction. I told her the submucous resection of the septum would give her good breathing ability and also correct the external deformity to some degree, but hardly altogether.

My prophecy was correct. The submucous operation gave her good nasal breathing and also changed the external appearance of the nosc greatly, as is always the case in those instances, but there still remained a pointing of the nose to the right.

The patient was not satisfied with the operation and insisted upon getting the nose straightened.

Under novocaine infiltration, I entered the nose from the vestibule, perforated the lateral cartilage and subcutaneously lifted off the skin. I then made a cut (subcutaneously) across the upper part of the cartilaginous ridge of nose and laterally outward through the upper lateral cartilage down to the maxillary bone. It then was very easy to overcorrect the nose and maintain it in this position for a week with adhesive strips, after which I inserted perforated metal splints in the nose. The result was perfect.

There is not much that is original or new in either of these two operations, especially not in reference to the second case, although the procedure in the first case is different from what I have been able to find in the literature.

The point I wanted to make was that we ought to be able to overcome our fixed idea that a patient gets used to either an internal or external deformity of the nose as long as the function is perfect and does not particularly care for the cosmetic deficiency. As Lee Cohen, Baltimore, in his splendid article which is published in the June issue of the Laryngoscope, says: "Why leave this work to the advertising quack who as a rule has neither facilities nor preparation."

The demand is considerable, the difficulties of the work not nearly so great as formerly was supposed, not to be compared with sinus work; the results are good and bound to be better the more we do of the work,—equally grateful to patient and operator. All that is needed is that we familiarize ourselves with the literature on the subject, which is rapidly accumulating.

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#### **EDITORIALS**

## PROGRAM ANNOUNCEMENT FOR THE OCTOBER MEETING.

As briefly announced in a previous letter, the whole or part of the second day of our meeting will be devoted to a symposium on the Cancer Problem. In the evening it is proposed to have a public meeting in a large hall where the public will be invited to listen to a discussion of the Cancer Problem by two or three eminent speakers who are to be furnished by the American Association for the Control of Cancer. We believe that such a meeting as this will accomplish much in this state through the education of the public on this important question.

We are pleased to announce that Dr. Fred T. Murphy, professor of surgery at Washington University of St. Louis, has consented to give the address in Surgery. He and Dr. Barker should make the strongest team our society has listened to for many years.

Our committee still has several vacant places on the program and would like to have more volunteers to read papers.

#### CHESTER M. ECHOLS.

Chairman Program Committee.

#### THE HUNDRED PER CENT. CLUB.

We wish to announce the foundation of a Hundred Per Cent. Club in the State Society which shall consist of those county societies which have reported as many members in good standing as they had December 31st, 1914. Remembering that there are fifty-three county societies in the state, it is of interest to note that the following were charter members of the Hundred Per Cent. Club on June first. Those marked with a star have increased their membership over last year. If your county is not in the roll, will you not help your secretary to get it there? If you have not paid your dues for 1915 please send him a check today—that will be doing your part.

Columbia
Dodge
Door
Dunn-Pepin\*
Ean Claire
Fond du Lac\*
La Crosse\*
Langlade
Marathon
Rusk
Shawano\*
Vernon\*
Wood\*

Chippewa

The total paid membership June 1st, 1915, was 1437, as compared to 863 June 1st, 1914, and 1757

Dec. 31st, 1914. We have admitted 87 new members in 1915 and there are now 376 delinquents. Are you one of them?

THE SECRETARY.

#### MEDICAL CO-OPERATION.

There is but one way to medical co-operation—through organization. The efforts of medical menduring the past ten years to perfect a working organization have been eminently successful. There are still some worthy and desirable practitioners outside the organization but these are few and the progress along these lines is remarkable. The way to closer co-operation has been opened. In meeting our fellow workers through the medium of our medical societies we have learned to know them better. That is the big step in co-operation.

Every business and profession recognizes today that the night of competition has passed and that the successful worker in any path of life is he who is working with others rather than he who is working against them. Medicine must not lag behind in her preparation to meet the new condition. The great problems of today cannot be solved by the individual. They require united effort. Competition has bred hatred, jealousy and misunderstanding; and scientific medicine has been retarded as a result. The quack and patent medicine vender have prospered through our quarrels. They are becoming extinct by reason of our co-operation. The hope of the future lies in working together.

R. S.

## DOOR COUNTY MEDICAL SOCIETY PUTS ITSELF ON THE MAP.

In the reports of Society Proceedings in this number of the Journal, will be found the first report from Door County for a number of years. But the report is so good, and the meeting was so successful that there is every reason to believe that Door County will be heard from frequently in the future.

We offer our hearty congratulations to the profession of the county for the splendid beginning they have made in reviving the Society.

#### WASSERMANNS AT A NOMINAL COST.

The proposal to make Wassermann examinations at a low cost at the laboratory of the Wisconsin Psychiatric Institute, which Dr. W. F. Lorenz of Mendota presented to the medical profession of the state in his paper in the February Journal, has been received with unanimous approval. The subject has been discussed by a considerable number of the County Medical Societies as will be seen in the recent reports of meetings and everywhere resolutions expressing thorough approval of the plan have been adopted without a dissenting voice. The State Homeopathic Medical Society expressed its approval of the plan in a similar manner. Individual expressions of opinion have all been favorable, so far as the writer's experience has gone.

It is therefore reasonable to believe that there is a genuine demand for services of this character and it is fair to assume that if the plan is put into effect the facilities offered will be used by the medical profession of the state to an extent which will justify the undertaking.

#### THE MAYO FOUNDATION.

The Report of the Special Committee of the Board of Regents of the University of Minnesota apon the Establishment of Graduate Medical Work at Rochester, Minnesota, is before us, and gives very clearly the general outline of the plan under which it is proposed to conduct the graduate work in case the offer of the Mayo Foundation is accepted.

The report begins with the following recommendation:

"In accordance with the instructions of the Board at the meeting of May 6, 1915, the Executive Committee has considered the possibilities of atilizing for advanced medical teaching and research the opportunities and facilities offered to the University by the Mayo Foundation.

"The Committee recommends that for a trial period of six years the University establish a part of its graduate work at Rochester, appoint investigators and teachers, set standards of work and graduation, and accept the maintenance funds, quarters, equipment and other opportunities offered by the Mayo Foundation.

"The Committee further recommends that in

case the experiment proves successful the work be continued on a permanent basis under these conditions: (1) complete control by the Regents of endowment funds and income, (2) appointment by the Regents of all directors, teachers, investigators and others connected with the Mayo Foundation, (3) the maintenance at Rochester, Minnesota, of quarters and administration for the Foundation work, with right to make from the endowment income appropriations for medical investigation anywhere inside or outside the State.

"It is believed that through this policy the University would fulfill a public duty by: (1) providing notable facilities for advanced medical training, (2) standardizing and controlling in the public interest the preparation of medical specialists, (3) fostering medical research not only on a State but on a national basis, (4) furthering the growth of graduate work on the University campus, and (5) increasing the efficiency of undergraduate teaching at the University."

It continues with a discussion of "The Nature of Graduate Work in Medicine," pointing out that

"The essential features of graduate instruction are: first, competent and inspiring leadership, second, carefully selected students, and third, proper facilities and materials. Unlike under-graduate teaching, graduate instruction is not given in classes or in a fixed course of study. The essential point of the training is its individual character. A graduate student works out his own salvation under suggestive guidance." \* \* \*

"In graduate work of any kind research plays a very large part. Technical proficiency alone is not sufficient. Originality and ability to conduct investigation must also be demonstrated.

"From these considerations it appears that the studies of a medical graduate desiring to perfect himself in a specialty should consist of: (1) Further work in the fundamental sciences of Anatomy, Physiology, etc., (2) Adequate practice in the technical procedures of diagnosis and treatment, (3) A thorough acquaintance with the literature of the specialty and related branches, (4) Original investigation of some question relating to his specialty."

"The Need of Graduate Work in Medicine" and "The Present Condition of Graduate Work in Clinical Medicine" are then considered, and special emphasis is laid upon the necessity for establishing standards for measuring the fitness of those

who are preparing to specialize in some branch of medicine. As the report says:

"There is need of standards: (a) of entrance or preparation for the study of a specialty, (b) of length of time, nature of course or kind of instruction needed for adequate preparation, (c) of certification of completion of such work or of fitness to begin practice along the special line. The lack of standards consequently affects medical specialism both from within and without, causes lack of confidence and lowered average efficiency."

A continuation of this same thought is presented under the heading "The Obligation of Universities Toward Graduate Work in Medicine":

"Again it is the duty of the universities, as the guardians of higher education, not only to teach but also to determine what amount and kind of training is needed properly to prepare medical specialists." \* \* \*

"If the standards are not set and maintained by the universities there will be no standards. It would be little short of a calamity if any group of physicians were to take out a charter as an educational institution and begin to grant degrees or certificates of proficiency in medical specialties. Immediately dozens of hospitals and clinics without adequate facilities or educational guidance would do the same thing. Certificates and diplomas would multiply and be without value."

"The Cost of Medical Education at Minnesota" is then discussed, and it is shown that the cost for plant and for annual maintenance would be prohibitive if an attempt were made to develop facilities for satisfactory graduate work in connection with the present University Hospital and Dispensary plant.

After taking up the subject of "The Relation of Medical School to Local Municipal and Private Hospitals," the "Present Status of Graduate Work in the University Medical School," and the "Present Status of Graduate Work Conducted by the Mayo Foundation," it is pointed out that the combined facilities of the University and the Mayo Foundation would offer extraordinary opportunities for advanced medical teaching, and for research, and would be of importance in unifying and standardizing medical education. It is also urged that there would be a favorable effect upon the future development of the Medical School, and upon graduate teaching.

The final recommendation of the Committee follows:

"The committee believes that the extension of graduate teaching proposed would enable the University to serve the state by insuring more expert medical service to its people, by furthering research into cause, cure and prevention of disease, by protecting the public by a system of education, examinations, diplomas, and degrees for specialists against incompetence and exploitation. The committee recommends, therefore, that the University establish graduate work at Rochester, Minnesota, that such work be directed by the Graduate School through its Dean and the Medical School Graduate committee, that professors and other teachers be appointed on the nomination of the same committee, to carry on graduate teaching and research at Rochester, and that the offer of clinical and other facilities and gifts made by the Mayo Foundation be accepted."

The principal of the trust funds established by the Founders is \$1,500,000, but the income is to accumulate for a period of six years, so that the endowment will be approximately \$2,000,000 at the end of that time. It is planned to start the work at once, but the cost of maintenance during the trial period of six years is to be borne by the Founders.

The Mayo Foundation is a magnificent gift to the medical profession of America, for its influence will not be limited to Minnesota alone, but will penetrate to every section of the country.

Of course, every portion of the proposed agreement between the Mayo Foundation and the University of Minnesota has received careful consideration from every point of view. There is one paragraph in it, however, which to the writer seems objectionable. Paragraph (C) of Section VIII reads as follows:

"(c) The place for carrying on the graduate medical instruction and research work with the endowment income shall be Rochester, Minnesota. This condition is not to be construed to mean that all of the net income of the endowment fund shall be spent in the City of Rochester. Whilst the work will be there maintained, and its medical and scientific work will be conducted and directed by the Board of Regents from Rochester, appropriations from the income of the endowment fund may be used for the promotion of medical research any-

where within or outside the State of Minnesota for any work of medical investigation."

That is a perfectly satisfactory arrangement for today, but "Forever is a long time," as has been truly said, and a hundred years from now that particular paragraph may be a source of much inconvenience. We do not believe that it is wise to try to bind too tightly the hands of future generations.

#### NEWS ITEMS AND PERSONALS

DR. W. P. SALBREITER, Racine, has been elected president of the new Board of Health of that city.

Dr. Barth Bartley, for many years located at Milwaukee, and for several years chief surgeon of the Wisconsin Veteran's Home at Waupaca, has been appointed assistant surgeon of the National Soldiers Home in South Dakota.

DRS. H. M. BUCHNER and R. J. GROVES, recently at the Madison General Hospital, have located at Prairie du Sac.

Dr. F. A. Rice, Delavan, is scriously ill. On May 6th he suffered an attack of hemorrhage of the stomach.

Dr. J. Klint, physician at the National Soldiers Home, Milwaukee, for the past two years, has resigned because of ill health. He is succeeded by Dr. James Troxler of the Dayton, Ohio, Home.

Dr. G. Windesheim has been re-elected chairman of the Board of Health of Kenosha.

Dr. Norman C. Hoffmann has been reappointed superintendent of the Wisconsin State Tuberculosis Sanatorium at Wales.

Dr. EMIL BUNTA, Milwaukee, has left the city to serve as a surgeon with the British army.

Drs. C. U. and U. Senn, will, in the near future, open a hospital at Ripon. Dr. C. U. Scnn has practiced at Ripon for the past five years, and Dr. U. Scnn has been connected with the Emergency Hospital at Milwaukee, for four years.

Dr. James Dean, recently of the New York City Hospital, has located at Madison, where he is associated in practice with his brother, Dr. Joseph Dean.

Dr. M. McGarty, associated with Dr. Edward Evans, at La Crosse, has recently returned from Boston and Baltimore, where he took post graduate courses at Harvard and Johns Hopkins Universities.

Dr. A. M. Kersten has been appointed health officer of De Pere to succeed himself.

Dr. O. L. Sapper, Mayville, who left to join the army in Germany, has reached Bergen, Norway, according to a message received on June 5th.

Drs. Paul B. Wallace and G. H. Schlesselman, Chicago, have formed a partnership at Tomah for the practice of their profession.

Dr. M. Morrison, Cashton, has recently taken in partnership, Dr. Francis Dolan, for the past year at St. Francis Hospital, La Crosse.

Dr. G. Rood, Stevens Point, one of the veteran practitioners of Wisconsin, was seriously injured in a runaway accident on May 12th.

Dr. M. B. Glasier, Bloomington, suffered a loss by fire, which destroyed her home and contents, on the night of February 22nd.

A building permit has been issued for the erection of the west wing of South View Hospital, Milwaukee's new municipal hospital for contagious diseases. The structure will be 180 by 112 feet, two stories high, and the estimated cost is \$90,000. It will be used to accommodate cases of small-pox, diphtheria and erysipelas.

The attorney general on May 14 advised the State Board of Health that local boards of health have authority to require pupils of private and parochial schools, as well as those of public schools, to be vaccinated for the prevention of the spread of small-pox.

Public health clinics in the public schools, as recommended by Health Commissioner Ruhland of Milwaukee, will not be held. The School Board,

the medical inspectors in the school system, and the county medical society opposed using school rooms for this purpose.

In order to give any reputable practicing physician, who may desire to do so for the minimum charge, an opportunity to execute medical certificates in connection with civil service examinations, the United States Civil Service Commission will receive the names of reputable physicians who wish to do the work. For further information inquiry should be made of the secretary of the local board of civil service examiners at the Post Office.

The so-called public welfare bill, which would abolish the present state board of health, state board of control, the treasury agent, and the state dairy commission, is opposed by the Milwaukee County Medical Society, which went on record against the bill now before the Legislature. The bill would substitute for the boards abolished, a state board of public welfare. The five members of the proposed welfare board would receive \$3,500 a year each. Dr. C. A. Harper, state health commissioner, says that the bill has been put through the assembly and committees without proper discussion.

#### MARRIAGES

Dr. J. J. Powell, Galesville and Miss Gertrude Vickerman, Preston, Minn., May 27, 1915.

Dr. Irving V. Grannis, Menomonie and Miss Sybil G. Craigie, St. Johns, New Brunswick, Feb. 16, 1915.

#### REMOVALS

Dr. A. A. Solberg will locate at Coon Valley.

Dr. Reginald St. E. Murray, Boston, Mass., and Milwaukce, will locate at Dodgeville.

Dr. C. A. Armstrong, Boscobel to Prairie du Chien.

Dr. Hugo Popper, Boscobel to Vienna, Austria.

Dr. W. P. Hartford, Cassville to Chicago.

Dr. F. M. Hartsook, Fennimore to Homer, Ill.

Dr. Fred W. Bromley, Palmyra to Whitewater.

#### **DEATHS**

Dr. C. W. Beemer, Kenosha, died on May 3d, 1915, aged 46 years. He was a graduate of the University of Toronto in 1893. He had practiced at Milwaukee, Port Washington and Kenosha.

Dr. William C. Raynor, a practicing physician at Milwaukee for more than thirty years, and a veteran of the civil war, died at his home on May 15, aged 72 years. He was a graduate of the Hahnemann Medical College in 1881.

Dr. Albert F. Fuchs, Loyal, died on May 5th. Death was due to Bright's disease. Dr. Fuchs was 59 years of age. He graduated from Rush Medical College in 1881. He first practiced at Fredonia, Wis., later he went to the state of Washington, and twenty-three years ago he located at Loyal.

Dr. Hugh Thomas Darcy, Hyde Park, Ill., formerly of Mineral Point, died on May 20, 1915, aged 51 years. Dr. Darcy was born at Mineral Point, Jan. 16, 1865. He received his early education in the parochial and public schools. He graduated from the Chicago College of Pharmacy. and engaged in the drug business. Later he took up the study of medicine, and graduated at Marquette University.

Dr. Alexander A. Ault, who practiced medicine at Oshkosh for more than forty years, died at Brooklyn, N. Y., on May 19, of apoplexy sustained May 7th, aged 77 years. He was a graduate of McGill University, Montreal, Canada. He retired from active practice at the death of his wife in 1908, and went to Brooklyn, N. Y., to live.

Dr. Edward C. Fish, for more than thirty years connected with the history and business interests of the village of Mosinee, died on May 13, after an illness of five weeks of tuberculous meningitis. Edward C. Fish was born at Orangeville, Barry County, Michigan, August 16, 1858, living on a farm and attending the village school until 18 years of age. He taught school for three years. After attending the normal school, he took up the study of medicine, entering the medical department of the University of Michigan, and graduating therefrom in 1883. In May, 1884, he came to Mosinee, and with the exception of 11/2 years spent at Hurley, had been a continuous resident at Mosinee. Dr.

Fish was a member of Marathon County and the State Medical Societies.

# **ABSTRACTS**

CORRELATION OF HEREDITARY OCULAR AFFECTIONS (EC-TOPIA LENTIUM CONG., ECTOPIA PUPILLAE, MYOPIA) AND SO-CALLED NOT CONGENITAL HEART TROUBLES. Strebel, J., and Steiger, O. (From the eye clinic of Prof. O. Haab and the medical clinic of Prof. H. Eichorst in the University of Zürich, Arch. f. Aug., 78, p. 208). Strebel describes the history of a family which showed through four generations a hereditary transmission of a specific predisposition to acquired rheumatic valvular affections through the mother, and besides, in the 3rd and 4th generations a hereditary propagation of congenital diseases of the aorta through the father, where the rheumatic and infectious elements were not conspicuous. The simultaneous occurrence of congenital ocular affections, partly from embryologic causes, excluded any doubt of the hereditary character of the heart lesions. Then Steiger reports 35 cases of interesting local and general correlations, observed at the eye clinic.

C. ZIMMERMANN.

INJURIES OF THE EYES BY RIFLE BULLETS DURING THE GREEK-TURKISH AND GREEK-BULGARIAN WARS. Cosmettatos, G. F., Athen, (Archiv. f. Aug., 78, p. 129), treated cut of 118 injuries of the eyes 43 caused by bullets, viz., 6 slight injuries of the cornea, 17 complicated lesions of the eyes and adnexa, as 2 of the lids and lacrimal canaliculi, 1 of cornea and iris, 2 of sclera and iris, 3 of vitreous, 1 of chorioid and ocular muscles, 2 of chorioid and optic nerve, 1 of retina, 2 of optic nerve, 1 of optic nerve and retina, 2 of visual centers, and 21 total destructions of the eyes, which are described in detail. Sixteen out of the 43 cases lost sight, 9 completely, 7 partially, and if the 21 total destructions are added, altogether 37.

C. ZIMMERMANN.

CONTROL OF EYE DISEASE IN PALESTINE. Feigenbaum, (Klin. Mon. f. Augenh., 52, p. 576), reports from the international health office at Jerusalem, that the summer conjunctivitis in Palestine is mainly caused by Koch-Weeks bacillus, which is also found in the conjunctival sac at times, when clinical symptoms are lacking. He agrees with Meyerhof that the inflammation from Koch-Weeks bacillus is a chronic affection with acute exacerlations. It is harmless in itself but most likely gives a predisposition to trachoma. The subacute and chronic inflammations of the conjunctiva are chiefly caused by diplobacilli.

Trachoma most frequently commences in children, as young as three years, and is spreading in indirect proportion to lack of cleanliness and hygiene. Next to gonoblennorrhoea it is the most frequent of blindness. F. recommends the foundation of a central office at Jerusalem for measures against trachoma.

# THE STATE MEDICAL SOCIETY OF WISCONSIN

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# NEXT ANNUAL SESSION, MILWAUKEE, OCTOBER 6-8, 1915.

The Wisconsin Medical Journal, Official Publication

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I of a watta	C Hubanthal Kalmant	II II Shockiev. Dariington.
Langlado	V Watson Antigo	I. C. Wright, Antigo.
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WordH	ngh F. Waters, Nekoosa	W. G. Merrili, Grand Rapids.

# SOCIETY PROCEEDINGS

#### CALUMET COUNTY

Calumet County Medical Society held a meeting at Forest Junction on May 13th, 1915, at 8 o'clock.

#### DANE COUNTY

The regular meeting of the Dane County Medical Society was held at Turner Hall, on June 8, 1915, at 8 P. M.

The following program was presented: "Recent Observations in Regard to Bacterial Infections, by Dr. Karl Smith; "Ectopic Pregnancy Following Salpingectomy," Dr. Jos. Dean; "The Harrison Anti-Narcotic Law," Dr. Fred C. Werner, Watertown; General Discussion of recent Procedures and Remedies.

## DOOR COUNTY

A meeting of the Door County Medical Society was held on May 19, at Sturgeon Bay. Dr. W. E. Schroeder, professor of surgery, Northwestern University, Chicago, was the special guest of the Society. Dr. Ovetz of Chicago and Dr. Elliott of Laona were also present. Clinics at both hospitals occupied the attention of the members the entire day. Dr. Schroeder gave a talk on Surgical Disease of the Kidney, illustrated by lantern slides. In the evening a banquet was held. This was one of the best meetings held in years.

E. H. ROBB, M. D., Secretary.

### EAU CLAIRE COUNTY

Ean Claire County Medical Society held its May meeting on the 24th at Eau Claire. The program consisted of a symposium on Sarcoma. Histology of Sarcoma, Dr. R. E. Mitchell; Gross Pathology of Sarcoma, Dr. R. F. Werner; Sarcoma of Skin, Dr. H. A. Fulton; Sarcoma of Muscle, Dr. L. H. Flynn; Sarcoma of Bone, Dr. I. Sloland; Sarcoma of Internal Organs, Dr. J. E. B. Ziegler; Treatment of Inoperable Sarcoma, Dr. E. E. Tupper; Sarcoma of Eye, Dr. F. S. Cook; Report of Case. Dr. P. E. Riley; Report of Cases, Dr. E. P. Hayes; Clinical Cases, Dr. E. L. Mason.

Supper at the Galloway House at 7:15 P. M.

R. E. MITCHELL, Secretary.

# FOND DU LAC COUNTY

At the meeting of the Fond dn Lac County Medical Society held at Fond du Lac on May 12, 1915, the society voted unanimously in favor of the laboratory of the Wisconsin Psychiatric Institute undertaking the work of making Wassermann examinations at a low cost. The

scientific program consisted of the following papers: "Morphine Addictions with Special Reference to Prognosis" by Dr. H. W. Powers, Wauwatosa; "Orthodontia" by Dr. W. F. Taylor of Fond du Lac, and "The Nose and Throat in the Etiology of General Diseases," by Dr. R. W. Porteus of Rochester, Minn.

HENRY C. WERNER, Secretary.

#### **GRANT COUNTY**

The regular meeting of the Grant County Medical Society was held at Lancaster, Thursday, May 13th, 1915. At noon a fine dinner was served at the Wright House, after which members assembled at the Country Club Rooms, and listened to the following program: A paper by Dr. N. E. McBeath of Livingston, on the Diagnosis and Treatment of Pulmonary Tuberculosis, was carefully prepared and intelligently presented, and was full of practical thought. Dr. H. J. Schrup of Dubuque, Iowa, showed to us by word pictures, and also by skiagrams, the conditions amounting to left sided appendicitis. A unanimous vote of thanks was extended Dr. Schrup for his efforts to be with us and give to us the benefit derived from his research in this unusual condition. Dr. E. MacDonald of Cuba City, chairman of the committee of the Grant County Tuberculosis Sanatorium Project, read an interesting paper concerning this subject. Much enthusiasm was shown by those present in this commendable undertaking, and the desire was manifest that we have a sanatorium in Grant County for the treatment of cases of this dread malady, and also to educate the people as to its prevention.

Dr. E. H. Spiegelberg of Boscobel and Dr. C. M. Schuldt of Platteville, were elected members of the Society. Dr. E. MacDonald of Cuba City was elected president; Dr. E. Kraut, Beetown, vice-president; Dr. M. B. Glasier, Bloomington, secretary and treasurer; Dr. John McGovern, Patosi, censor for three years; Dr. M. B. Glasier, delegate; Dr. M. A. Bailey, Fennimore, alternate.

There were present: Drs. S. W. Doolittle, J. C. Doolittle, J. H. Fowler, Rush Godfrey, Lancaster; H. J. Schrup and Melhop, Dubuque, Ia.; John McGovern, Patosi; E. Kraut, Beetown; H. H. Hancock, F. H. Baldwin, M. B. Glasier, Bloomington; James Oettiker, W. W. Pretts, W. Cunningham, Platteville; E. C. Howell, M. A. Bailey, Fennimore; N. E. McBeath, Livingston; H. J. McLaughlin, Glen Haven.

By invitation from our president, the next meeting will be held at Cuba City. Thus closed one of the most enjoyable and profitable meetings of this progressive society.

#### IOWA COUNTY

The annual meeting of the Iowa County Medical Society was held at Dodgeville, on May 11th, 1915, when the case of Dr. O. W. Joslin was discussed, and on recommendation of the board of censors, the society by a unanimous vote suspended Dr. Joslin for one year.

The question of having the Wisconsin Psychiatric In-

stitute undertake the work of making Wassermann examinations was taken up. The society is in favor of having the work done by the laboratory as suggested. A resolution to that effect was passed by unanimous vote.

Officers for the ensuing year were elected as follows: President, Dr. McAllister, Avoca; vice-president, W. M. Gratiot, Mineral Point; secretary and treasurer, J. R. Hughes, Dodgeville; censors, W. S. Lincoln, Dodgeville and H. D. Ludden, Mineral Point; delegate, Dr. McAllister, Avoca; alternate, A. D. Brown, Mineral Point.

JOHN R. HUGHES, M. D., Secretary.

# JEFFERSON COUNTY

The Jefferson County Medical Society met in the Johnson Creek Club Rooms, Johnson Creek, on April 18th. The program was opened with an address by its president, Dr. H. P. Bowen, entitled "Ideals for which to Strive." Dr. Bennett of Ft. Atkinson read a very incresting paper on "Treatment of Ear Abscess," and Dr. Herbert Powers, Wauwatosa, discussed the treatment of drug addictions.

#### MARATHON COUNTY

The regular meeting of the Marathon County Society was held at the Wausau Club, Wausau, on May 4th. C. B. Bird spoke on the Harrison Law, and papers were read by Drs. D. T. Jones, J. F. Smith, and R. W. Jones,

# **OUTAGAMIE COUNTY**

The Outagamie County Medical Society, at their quarterly meeting held at Appleton April 29th, passed a resolution in favor of a laboratory being established at Mendota, for the purpose of making Wassermann tests without charge.

W. N. Moore, M. D., Secretary.

# ROCK, GREEN, DANE, SAUK, COLUMBIA.

A joint meeting of the societies of Rock, Green. Dane, Sank and Columbia Counties was held on May 11, 1915, at Evansville, Wis. The following program was presented: "Labor Cases Complicated by Accident," Dr. Julius Noer, Stoughton. "Ectopic Pregnancy Following Salpingectomy," Dr. Jos. Dean, Madison. "School Medical Inspection with Reference to the Detection of Diphtheria Carriers," Dr. John R. Newman, Madison. Dinner at the Central House at 12:30. Toastmaster, Dr. John M. Evans, Evansville.

Afternoon session: "Brain Tumors, Diagnosis and Treatment," Stereopticon, Dr. Allen B. Kanavel, Chicago. "Some "Obscure Cases of Eye Strain of Special Interest to the General Practitioner," Dr. Fred D. Lintleman, Janesville, "Surgery of the Abdomen." Dr. Daniel R. Connell, Beloit.

FRED E. SUTHERLAND, M. D., Secretary Rock County Medical Society.

#### WAUPACA COUNTY

Waupaca County Medical Society held its quarterly meeting at New London, May 20, 1915. While our program was slightly interfered with by the illness of one of our members, the meeting was pronounced a success by all in attendance. A most interesting paper was given by Dr. C. J. Combs of Oshkosh, on "Gall Stones." This paper was discussed by the society in general, and both paper and discussion were very helpful. Although the rain poured down we had the usual attendance, and considered the applications of two physicians for membership.

The society adjourned to meet for the midsummer session at the Wisconsin Veteran's Home.

GEO. T. DAWLEY, M. D., Secretary.

#### WINNEBAGO COUNTY

Meeting of the Winnebago County Medical Society with the Neenah-Menasha Medical Club at the Menasha Club, was held Friday, June 4th. Dinner at 6:30 P. M. The following program was presented: "Cancer," Dr. G. H. Williamson: "War in Serbia," Miss Matilda Kluege.

H. W. Morgenroth, M. D., Secretary.

#### NINTH COUNCILOR DISTRICT.

The annual meeting of the Ninth Councilor District Medical Society comprising the counties of Wood, Marathon, Clark, Waupaca and Portage, was held at Stevens Point on May 20th. Dinner was served at the Hotel Sellers at 7 o'clock, followed by a program and business meeting at the Public Library. The society was fortunate in securing for the meeting Dr. Emil Ries of Chicago, who spoke on the "Pathology, Diagnosis and Treatment of Cancer." The lecture was illustrated with specimens and lantern slides. After the program the election of officers took place. Dr. J. C. Hayward of Marshfield was elected president and Dr. J. F. Smith. Wausau, re-elected secretary.

It was voted to hold the summer convention in Wanpaca, the fall convention in Wausau, and the winter convention in Marshfield.

# MILWAUKEE OTO-OPHTHALMIC SOCIETY.

At the regular meeting of the Milwankee Oto-Ophthalmic Society held on May 8th, there were eleven members and thirty-six guests present. The speaker of the evening was Dr. F. E. Moorchead of Chicago, whose subject was "Metastatic Focal Infections and Treatment of Mouth Lesions." The paper was disensed by the following: Drs. G. V. I. Brown, Eisen, Federspiel, Gray, Gaenslen, Hopkinson, Wenker and Moorchead.

Dr. A. G. Kreutzer exhibited a case of basal fracture through the temporal bone running through the tympanic cavity, and causing a facial paralysis on the left side with dizziness and nystagmus.

G. I. Hogue, M. D., Secretary.

# **BOOK REVIEWS**

THE PRACTICE OF SURGERY. By James G. Mumford, M. D., Lecturer on Surgery in Harvard University. Second Edition, Thoroughly Revised. Octavo volume of 1032 pages with 683 illustrations. W. B. Saunders Company, Philadelphia and London, 1914. Cloth, \$7.00. Half Morocco, \$8.50.

The author of this volume has undertaken to present surgical diseases in the order of their "interest, importance and frequency," laying "stress on those subjects which nature herself has accentuated." It might be possible with the use of statistics to arrange diseases in the order of their frequency, but who will be the judge as to their comparative interest and importance? The author puts appendicitis at the head of the list, and there will be little difference of opinion as to the correctness of his judgment in this particular instance. But this is about the extent to which we can agree with the author in the matter of the relative importance of surgical conditions as indicated in the sequence of presentation which he adopts. For instance, discases of the rectum and anus are given precedence to those of the stomach and bile passages; uterine lacerations and displacements and other minor diseases of the generative and genito-urinary organs are considered in the first part of the volume, whereas diseases and injuries of the head and spine, fractures and the diseases of bones and joints are relegated, by inference from the author's preface, to a relatively unimportant rank.

The arrangements of subjects in a work on clinical surgery, such as the present one, is really immaterial. A simple anatomical scheme, such as is followed in most of the works on practical surgery, is satisfactory and probably the most serviceable.

The author has, however, characterized the more important subjects in another manner, one which greatly enhances the value of the work; this is the very thorough and exhaustive discussion which he gives to some of the more prominent surgical affections, such as appendicitis, intestinal obstruction, etc. This most commendable feature raises the excellence of the work well above the rank and file of surgical text books now extant.

Many of the illustrations are copied from previous publications, both text books and monographs, due credit being given to these sources. Some of the surgical illustrations are inaccurate; for instance, on page 33 are two illustrations intended to show the high and the low McBurney incision; both, however, show the incision at exactly the same level relative to the position of the umbilicus and the anterior superior iliac spine. In some of the illustrations of the chapter on diseases of the rectum and anus one fails to see why they should include an almost lifesize portrayal of the external female genitalia.

The work is valuable chiefly by virtue of the lucid and thorough discussions above referred to. Necessarily, in attempting to cover the entire field of clinical surgery, including diseases of the pelvis, fractures and dislocations, and genito-urinary diseases, in a single volume of about one thousand pages, many conditions could receive but brief, and often inadequate, consideration. The work of the publishers has been admirably done. Every student of surgery will find within the volume much of value and interest, but many readers will agree with the reviewer in the wish that the author had confined himself to a diseussion of a limited number of the surgical affections which are rightly considered as constituting the pre-eminently important conditions in the domain of general surgery.

H. REINEKING.

DIAGNOSTICS OF THE DISTURBANCES OF THE COLOR SENSE. Stargardt, Prof., and Oloff, Marine-Surgeon, Kiel. 45 pp. Berlin. Julius Springer, 1912. This brief guide to the examination for color sense will be especially welcome on account of its practical value, as the authors, who for years conducted the color tests on the abundant material of the German Navy, speak from an unusually large experience. After chapters on the importance of the examination for color sense for the avoidance of accidents and the consideration of the social conditions of the applicants, on the normal color sense, and its theories, the disturbances of the color sense and their diagnosis are very clearly set forth with a critical discussion of the merits of the most important methods tor their detection, and directions for the use of the anomaloscope of Nagel, the most reliable test in doubtful cases. We highly recommend the useful work.

C. ZIMMERMANN.

A TEXT-BOOK OF DISEASES OF THE NOSE AND THROAT. By D. Braden Kyle, A. M., M. D., Professor of Laryngology and Rhinology, Jefferson Medical College, Philadelphia. Fifth edition, thoroughly revised and enlarged. Octavo of 856 pages with 272 illustrations, 27 of them in colors. W. B. Saunders Company, Philadelphia and London, 1914. Cloth, \$4.50, net.

In the galaxy of recent text-books on diseases of the nose and throat the new edition of Kyle's work occupies a prominent place, on account of its completeness, based on a large experience, and clear presentation of the subject. As it addresses not only the specialist, but also the general practitioner and student, each chapter is complete in itself, giving in it all the matter desired. In almost every chapter alterations and additions have been made, e. g., general consideration of mucous membranes, ocular symptoms in diseases of the nasal cavities, syphilis, complications in ethmoiditis and frontal sinusitis, etc., and entirely new articles have been added; vaccine therapy, salvarsan, cte. The sections on operations, e. g., of the tonsils, corrections of septal deformities, have been thoroughly revised, and the surgical technic brought to date. The table of contents and index are very complete and the external appearance, print and paper, very good.

C. ZIMMERMANN.

Progressive Medicine, a Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences, edited by Hobart Amory Hare, M. D., Professor of Therapeutic Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia; Physician to the Jefferson Medical College Hospital; one time Clinical Professor of Diseases of Children in the University of Pennsylvania; member of the association of American Physicians, etc., assisted by Leighton F. Appleman, M. D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia, Ophthalmologist to The Frederick Douglas Memorial Hospital; Instructor in Ophthalmology, Philadelphia Polyclinic Hospital and College for Graduates in Medicine. Publishers, Lea & Febiger, Philadelphia and New York, 1915.

Volume 1, March, 1915. Surgery of the Head and Neck, Surgery of the Thorax, Excluding Diseases of the Breast, Infectious Diseases, Including Acute Rheumatism. Croupous Pneumonia, and Influenza, Diseases of Children, Rhinology and Larynology, Otology.

Volume 2. June. 1915. Hernia, Surgery of the Abdomen, Exclusive of Hernia, Gynecology, Diseases of the Blood. Diathetic and Metabolic Diseases, Diseases of the Spleen, Thyroid Gland, Nutrition, and the Lymphatic System, Ophthalmology.

The great value of this publication is that it gives much more than an abstract of the work done in these departments of medicine during the current year; it presents an appraisal by a competent authority of the year's progress and so economizes the reader's time by presenting for his consideration only what is important, supplemented throughout by judicious editorial comment.

Progressive Medicine is the best sort of a perennial post-graduate course and we hope the number of its readers may steadily increase.

Local and Regional Anesthesia, including Analgesia. By Carroll W. Allen, M. D., of Tulane University, New Orleans, with an introduction by Rudolph Matas. M. D., of Tulane University, New Orleans. Octavo of 625 pages with 255 illustrations. W. B. Saunders Company, Philadelphia and London, 1914. Cloth, \$6.00, net; Half Morocco, \$7.50, net.

As there existed no book in the English language that gives a full presentation of the entire field of local anesthesia the author has filled by this elaborate work a real want. It is preceded by an introduction by Prof. Matas who has largely contributed to the development of this method of anesthesia in this country, as the many references to, and quotations from, his works in the discourse attest. Starting with a very interesting chapter on the history of the efforts of the human race to find means to control pain during operative procedures, nerves and their sensations, especially pain, osmosis and diffusion, the anesthetic effects of pressurcanemia, and cold and water anesthesia, are discussed, then the individual anesthetics, toxicology, adrenalin, principles of technic, the use of morphine and scopolamin and combined methods of anesthesia, indications, contraindications, shock, anoci-association of Crile, intraarterial and intravenous anesthesia. The greatest space is devoted to the systematic detailed description of the methods of anesthesia suitable to operations in the different regions of the body, including the eve, ear, nose and throat and dental anesthesia, with special chapters on spinal analgesia and epidural injections on paravertebral and parasacral anesthesia. Tables of the technic of injections employed for the individual teeth, the sensory innervation of the head and neck with mucous membranes and meninges, and compilation of investigations on the skull as to measurements, table of contents and a well prepared index conclude the book, which has in front a table of contents. The subject is exceedingly well presented in a most pleasant style by the author who was especially qualified for writing the work, as, to speak with Prof. Matas. "he has assiduously cultivated the technic in all its variations, many of which are his own, whose steadfast loyalty to these methods for many years has been rewarded by a reputation for special skill and judgment in their application which is eminently deserved." Thus the conscientious and practical, handsomely gotten up work will prove not only a very useful guide but will help to strengthen and diffase the methods more widely.

C. ZIMMERMANN.

# **ABSTRACTS**

ON THE CAUSAL CONNECTION OF CHRONIC EYE DIS-EASES WITH SO-CALLED ARTICULAR RHEUMATISM, ESPE-CIALLY WITH CHRONIC PROGRESSIVE POLYARTHRITIS AN-CHYLOSANS ET DEFORMANS. Stuelp, O., Mühlheim a. R., (Zeit. f. Aug., 32, p. 341 and 435), gives, after a review of literature, especially Poncet's doctrine of rheumatism tuberculeux, which S. does not recognize as proven, and the report of 9 cases, the following resumé: All chronic diseases of the joints (primary or secondary mono-, cligo- or polyarthritis) are not rheumatic, hence eventnal complicating ocular affections are not to be regarded as rheumatic and not to be treated antirheumatically. Tuberculosis is not the sole common cause of the combination of the extant diseases of the organs, but a careful general examination will show different, mostly multiple, and perhaps co-operating, etiological elements, especially acute and chronic infections diseases, anginasepsis, gonorrhea, lues, arteriosclerosis, chronic lead poisoning, indicanuria, and other acute infectious diseases. The etiological therapy must, as S.'s cases show, be directed against all causes by combined methods of treatment. C. ZIMMERMANN.

Refraction in School Children, Carsten, P., (Cont.) (Woch, f. Therap, and Hyg. d. Auges, 17, p. 101. Klin, Mon. f. Aug. 52, p. 316), found in 600 out of about 7.500 children of the common schools ametropia, i. e., 8%. The most frequent anomaly was astigmatism, mainly hypermetropic 2.9%, hypermetropia 2.35%, myopia 1.46%. Cases of myopia of 1 D and less must principally be examined in mydriasis with the ophthalmoscope for excluding spasm of accommodation. Myopic astigmatism was relatively rare.

C. ZIMMERMANN.

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# THERAPEUTIC NOTES

### AN IDEAL ETHER CONTAINER.

To their well-known ether can with dropper-tube attachment Parke, Davis & Co. have added the regulation outlet or corked opening. This was done for two reasons. While a vast majority of anesthetists will undoubtedly continue to use the bent dropper-tube, which when cut permits the entry of air in one section and the ether to flow from the other, the older method may occasionally, for some reason, be preferred. Then, again, ether may be wanted for some purpose other than anesthesia. The improved container meets both needs. The physician can utilize the bent-tube device if he chooses. He can use the corked opening if he prefers. The new ether container appears to leave nothing to be desired.

# THE ABBOTT ALKALOIDAL COMPANY CHANGES ITS NAME.

Owing to the rapid expansion and broad generalization of its business as manufacturing and importing chemists, The Abbott Alkaloidal Company has deemed it expedient to change its incorporate name to The Abbott Laboratories, and has done so.

For a number of years, this company has been broadening out and enlarging the scope of its activities. As most readers of this journal will remember, some four or five years ago it entered the biologic field and now puts out a full line of serums, antitoxins, vaccines, and similar products, both for human and veterinary practice. Also, it is engaged in the manufacture of pure chemicals and is constantly adding to its already large line of pharmaceutical products, many of which are not distinctively alkaloidal.

It is only fitting and proper, therefore, that a name should be adopted, which is broad enough to cover all the activities of this progressive, up-to-date American enterprise.

It is becoming recognized among the members of the medical profession that semi-invalids are usually given too much time for introspection and that if useful, interesting occupation is provided, their symptoms really become less acute.

In line with this healthful theory, the Battle Creek Sanitarium has instituted an Occupational School in which many of the patients have already interested themselves to their health betterment.

Many useful branches are taught in this school, including weaving, basketry, steneiling, elay-modeling and others

The efficacy of the project, especially in quieting nervous patients, has been clearly demonstrated.

# JOKES AND NEAR JOKES

#### A GOOD INTRODUCTION.

George Ade is said to have introduced a speaker at a banquet by remarking:

"Two towns in Indiana lay elaim to the honor of Mr. Blank's birthplace." (A pause during which Mr. Blank strove to look modestly deprecating.) "Warsaw states that he was born in Kokomo and Kokomo insists that the honor belongs to Warsaw."—Everybody's.

#### AN APOLOGY.

John Phillips, the magazine editor, has a suspicion that form letters are sometimes dangerous. Not long ago he wrote a letter of complaint to a western railroad, explaining in detail why he had preferred to sit up all night in a smoking compartment rather than share his berth with a fine line of bugs that are not called by their first name in polite society. The letter of apology that he received was so much of an apology and so reasonable an explanation, that Mr. Phillips felt perhaps he had been unreasonable in filing his complaint, when he happened to notice that his original letter, through error, had been returned with the letter of apology. Looking at it he saw scrawled across the top this bluepenciled indorsement:

"Send this gny the bedbug letter."-Everybody's.

### WHY SHE SAVED.

Mrs. Brady:.—"Och, Missns O'Toole, yez be wurrukin' noight an' day."

Mrs. O'Toole.—"Yis, Oi'm under bonds to kape the pace for pullin' the hair o' that blaggard, Missus Murphy, an' the magistrate told me that if Oi touched her again he'd foine me tin shillings."

Mrs. Brady,—"An' yez wnrrukin' hard so's to kape outer mischief?"

Mrs. O'Toole (between her teeth).—"No. Oi'm savin' up to pay the fine."

## A PSYCHOLOGICAL COLLECTOR.

He was a college boy, home from vacation, and his mother's cook had prevailed upon him to lend her \$5. Much to the surprise of the family, cook departed from her practice of keeping such funds indefinitely, and paid the debt promptly. When questioned about it, she said:

"No, dat boy never once ask me fer dat money. He never dum me at all, but when I serves his late breakfast in de morning, he always leave five biscuits on de plate, when he used to eat 'em all, an' he tells me he likes five lumps of sugar in his coffee, when everybody knows dat's too sweet. Den when I goes in my kitchen, I finds five raw potatoes on my table an' five lumps of coal laid by my stove. Dem fives jes' natchully ha'nts me, so I pays him."—New York Evening Post.

# The Wisconsin Medical Journal

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# ORIGINAL ARTICLES

CONTRA-INDICATIONS TO THE USE OF THE KNIFE IN THE TREATMENT OF SKIN CANCERS OF THE FACE. BY ARNOLD DREXEL, M. D., MILWAUKEE.

The general impression still seems to prevail in the minds of many physicians that in order to obtain good result all skin cancers must be excised, no matter where located. This impression is a wrong one, and the sooner it is discarded the better it will be for both physicians and patients. Frequently patients with cancers on the face will refuse to be operated on, but will readily submit to any other kind of treatment. These are the very patients who will make the rounds from one physician to the other until they find someone who will treat them by other methods than the knife, or will seek the advice of some charlatan, advertising or "cancers cured by mail" quack, losing much valuable time, which may result in a fatal termination. In many cases insistence upon the use of the knife only shows a lack of knowledge on the part of the physician of the various methods employed in the treatment of face cancers. The aversion to the knife, the age and physical condition of patient, the nature, size and locality of the cancer, the exciting causes, the existence of other skin diseases accompanying the cancer, the enlargement of neighboring glands, etc., must be taken into consideration before we can select the proper treatment for cancers of the face, to which I confine my paper.

It should be our aim not only to remove cancers whenever and wherever they appear, but also to select such remedies as in our opinion will effect a cure and also produce the best cosmetic result. For example a cancer on the lip may be removed successfully by the knife, but when multiple, or of such a size that their removal would cause too much tissue loss, they should not be excised. Nor should a cancer of the lip be excised when diseases, such as eczema, cheilitis glandularis, etc., accompany it

in the same locality. In order to prevent the reappearance of a cancer it is not good practice to remove it without removing the exciting causes also. Nor is it good practice to excise a cancer in a locality where its removal would result in great disfigurement to the face. We should consider the patients future before selecting a treatment.

In order to illustrate more clearly the contention of my paper, the following cases are cited:

CASE 1. Mr. C. D., 40, baker, inveterate smoker, consulted me in 1907 for two growths on lower lip. They were ¼ inch apart. The larger one was the size of a small hazel nut, the smaller, the size of a pea. Both were deep seated and hard to the touch. The larger of the two had started about four years previously. The vermilion lip was covered by crusts and in several places was fissured. Diagnosis of growths, epithelioma. Diagnosis of the disease accompanying it, eczema.

Patient at various times had attacks of eczema in axillae, and on the hands and fingers. Mother and two brothers have had attacks of eczema. The treatment employed in this case consisted of applications of arsenic paste. Not only were the growths treated by it, but also the other portion of the lip affected by eczema. Up to the present time there has been no return of growths or eczema on lip and cosmetic effect is good.

In this case the knife was not indicated for the reason that two growths existed on the lip. To remove each growth separately, or to remove both by one wedge-shape excision of about ½ inch in width, would have caused too much loss of tissue, which would have resulted in a contracted lip. Had only the cancers been treated and not their exciting cause, the eczema, it would have been only a matter of time when new growths near the sites of those removed would almost certainly have appeared.

Case 2. Mrs. B., age 53, occupation, housework, was referred to me in 1911 for an affliction on lower lip. The trouble had started three years previously and was caused, as nearly as could be determined, by the exposure of the lip to the sun's rays, after which the lip became inflamed and

<sup>\*</sup>Read before the Medical Society of Milwaukee County, January 8, 1915.

swollen, and vesicles and blebs would appear from time to time. Patient has had various treatments including X-rays, without effect. At the time of patient's first visit, two flat ulcers with hard, whitish borders, were situated on the lip and the whole vermilion lip was covered by crusts. Diagnosis, epithelioma. Treatment, arsenic paste, and later astringent and soothing lotions. No relapse up to present time and cosmetic effect is very good.

In this case the knife was not indicated for the same reasons as in case 1. Although the treatment of the cancers was the same as in case 1, the exciting cause was different, in this case being a dermatitis solare which had to be treated accordingly.

Case 3. Mrs. M., age 45, occupation housework, consulted me in 1911 for a hard, deep-seated, large-hazelnut-sized growth on the lower lip. The lip was otherwise not diseased. As far as patient could remember, the growth had started in 1907. In 1905 a similar growth had been excised close to the seat of the one in question. Diagnosis, epithelioma. Treatment, caustics. No relapse and cosmetic effect is as good as could be expected.

On account of the large size of the growth and also on account of the excision of a growth previously, the knife was not indicated for the reason that the lip was already somewhat contracted and to excise the growth in question would have caused a still greater contraction, resulting in great disfigurement of the face.

Case 4. Mr. M. L., age about 70, inveterate smoker, consulted me about 20 years ago for a hard, pea-sized growth on lower lip. About two years previous to this, patient had a similar growth cut out near the seat of the one in question. The vermilion lip was fissured, and in parts covered by thin crusts. Diagnosis, epithelioma. Treatment, excision. A few stitches were then inserted, the wound healed nicely and to use the general term, the operation was successful. But! Two years later I met the patient on the street and he drew my attention to a growth near the site of last operation. Another operation was advised, but the patient said that he had had enough cutting done and would not submit to another operation. At that time the patient's lip was very much contracted, causing the mouth to continually stand open. This was still more marked when patient spoke or laughed. The question naturally arises: What would have been the appearance of the lip had a third operation been performed? In reporting this case it certainly is not my intention to praise the method of treatment employed and the good results obtained therefrom, but to show the lack in not giving the proper attention to the exciting cause of the cancer, which in this case probably was an eczema. This case clearly showed the inability of the operators to cope with the conditions that presented themselves.

CASE 5. Mr. C. R., age 47, farmer, was referred to me for a hard non-ulcerating growth the size and shape of a navy bean, situated on lower lip in the median line. The whole lip was very much inflamed, tender and swollen and the vermilion portion covered by crusts. The submaxillary glands were markedly enlarged and painful to the touch. Patient has had treatment for a period of about three months. Diagnosis of growth, epithelioma. The great inflammation and swelling and the crusting of the lip, could not have been caused by the small and non-ulcerating cancer. Nor were the enlarged and tender glands considered to have anything in common with it, which theory was later found to be correct. On and near the borderline of mucous membrane and vermilion lip were from twelve to fifteen small pinhead-size openings, exuding a tenaceous, mucus-like substance. Diagnosis, cheilitis glandularis. Treatment: At first the treatment consisted of remedies to remove the inflammation and reduce the swelling of the lip. Under this treatment the inflammation and enlargement of the submaxillary glands also subsided. Later the cancer was treated by caustics and still later the cheilitis was treated by the electric needle and by X-rays. For the reason that this case is still under observation, the result of treatment cannot be reported.

In this case two important questions arose which had to be solved before a proper course of treatment could be instituted. The first was: what caused the inflammation, the swelling and the crusting of the lip? The second: What caused the submaxillary glands to enlarge? If we keep in mind the small size of the cancer in question, its non-ulcerative nature, the chronic non-inflammatory course generally persuded by such cancers, we must conclude that acute inflammation, swelling and crusting of a lip are not symptoms of cancer, but symptoms of cheilitis glandularis. If we again keep in mind the small size of the cancer, its non-ulcerative nature, and the acute inflammation and swelling of the lip, we also must conclude that the

enlargement of the sub-maxillary glands was not caused by the cancer.

In reporting this case I have only one object in view, and that is to warn the over-zealous operator against making an extensive operation where the symptoms of those diseases which often accompany cancers of the lip, are not fully understood by him.

Case 6. Mr. A. J., 56, carpenter contractor, consulted me in 1912 for a deep seated ulceration 3/4 inch in length 1/4 inch in width, extending from the median line, directly over the junction of nasal bones and lateral cartilages diagonally down and half way across the right wing of nose. There was scarring in the immediate surrounding of the ulcer. The patient stated that the ulcer had started 16 years before and was gradually spreading in spite of all treatments. In 1910 patient went to Europe to visit a well known light cure institution for relief, but did not take treatment because a cure was not promised.

Diagnosis, epithelioma, rodent type. Treatment-caustic. One month later no sign of ulceration, and up to present time no relapse. Cosmetic effect is good. Had patient followed instructions more carefully the cosmetic effect obtained might have been still better.

In this case the location and the length and width of the ulcer were against the use of the knife. In order to remove by excision the ulcer mentioned, it would have been necessary to cut at least one-sixth of an inch beyond its border and down to the bone and also remove about one-half of the wing of nose which would have resulted in a great disfigurement of the nose.

Case 7. Mrs. M., age 65, consulted me in May, 1912, for a growth on and near the tip of the nose, median line. The growth was the size of a cent, irregular in outline, nodular and hard. It had started according to patient's statement from a small pimple. Diagnosis, epithelioma. Treatment caustics. No relapse up to present time and cosmetic effect obtained is good. The nose is at present of normal size and shape which would not have been the case had the cancer been excised.

Case 8. Mr. J. H., age 49, was referred to me in April, 1913, for a flat ulcer the size of a quarter, and situated in and about the center of left cheek. The ulcer was irregular in outline, and its border narrow. Serous exudate slight. Patient stated that the trouble had started eight months before,

when a barber accidentally cut into a small mole which had existed on the cheek for several years, and that the wound never healed. Diagnosis, epithelioma, rodent type. Treatment, caustics. Up to present time no relapse, scar is flat and almost level with the surrounding skin and the cheek has retained its normal size and shape.

For two reasons the knife was not indicated in this case. One was the large size of the ulcer, the other its locality. To be able to approximate by stitches the edges of a wound made by the excision of an ulcer the size and in the locality of the one in question, would necessitate cutting through or nearly through the whole tissues of the cheek, which would result in a contracted cheek devoid of its original rounded shape and contour.

Case 9. Mr. H. H., age 61, carpenter, consulted me in 1908 for a pea-size ulceration with an irregular and uneven border and situated on right temple. It had started from a brown tubercle, which had existed for several years. Numerous brownish and yellowish patches of various sizes, were seen on temples, forehead, other parts of the face and on the hands. The skin in general was poorly nourished and wrinkled and had the appearance of that of a man of 80. Diagnosis of ulcer, epithelioma, rodent type. Treatment, caustics. The wound healed very slowly on account of the low vitality of the skin. Judging from the appearance of the part treated, a relapse of the cancer could be anticipated. In 1912 patient again consulted me for ulcerations of the same nature as previous ones. This time there were situated two on right and one on left temple. Treatment, carbon-dioxide snow. Although there has been no relapse on the sites of previous ulcers and the parts treated at present appear as though the disease has been eradicated, yet it is only a question of time when others will appear in some of the brown patches so numerous in this case and for which cancer has such a great predilection. In this case the knife was not indicated, nor is it indictated in cases where similar conditions exist, because we have at our command other remedies by the use of which we are able to destroy cancers without subjecting the patient to a general anesthesia, which in these particular cases is dangerous and by which we are able to obtain a better cosmetic

Before closing, I wish to draw your attention to the following points:

That an aversion to the knife, should in most cases contra-indicate its use.

That, when two or more cancers, or one large one exists on the lip, with no cancerous gland enlargement, they should not be excised.

That no cancer should be excised from the lip, without also removing all exciting causes thereto.

The cancers on the nose should not be excised, except in cases where other methods of treatment may be considered not practical.

That enlarged and tender sub-maxillary glands concomitant with cancer of the lip are not necessarily cancerous.

And last but not least, that skin cancers on the face more rightly belong in the field of dermatology than in that of surgery.

# EPITHELIOMA OF THE EYELIDS.\*

REPORT OF SIX CASES TREATED BY ROENTGEN RAYS.

BY SAMUEL G. HIGGINS, M. D.,

MILWAUKEE.

Having four cases of epithelioma of the eyelids under observation and treatment at the time of the announcement of Dr. Carl Fisher's paper on the subject at the last meeting of the American Medical Association, I thought it timely to report their histories to you. The subject is not a new one, but the opinions as to method and time of treatment seem to be such as to warrant discussion. Any practitioner may be approached by these patients and it is well that the disease be considered as seriously as it warrants, and not as one may be tempted to treat it in a procrastinating or "watchful waiting" manner.

The symptoms are so slight and the discomfort for so long a period so void of distress that the patient is inclined to attempt to outlive his cancerous enemy. A tiny blotch may be noticed on the lids and without causing any disturbance it may be almost forgotten, when in a few months a small spot is seen to be possibly reddened, or barely raised above the surface and irregular in outline, or of the appearance of a small wart. The individual usually recalls at this time some trivial injury received some time previously or rarely that

there has been a rather continuous irritation from ill-fitting glasses. At this time he is offered various kinds of advice and treatment which he gives a varying period of trial. With regard to the use of pastes Fisher remarks that "in the hands of persons practiced in this procedure many surprising cures are obtained, and these sometimes in apparently inoperable cases." The Roentgen ray is often used and can be recommended as being valuable both before an operation and for continued post-operative treatment. Fisher's inclination is toward operative measures. I trust that your observations may aid in the judgment of what to do and when to do it for these cases and that your interest today will aid in arriving at a decision at some later meeting.

The pathology of epithelioma of the lids shows a cancer of the basal-celled type, spreading by continuity, not by glandular metastasis, and later breaking down at the surface, a type recognized clinically as rodent ulcer. The most important feature from the clinical viewpoint is the slow growth of the tumor. In the later stages squamous cells are found as well as the basal cells. Anaplasia of the basal mother cells leads to the production of prickle cells, simulating sarcoma under the microscope.

"In the series of 88 cases observed by Fisher the average age of incidence was 53 years. The youngest patient was 24 years old. The average patient waited five years before coming for treatment; many of them from 15 to 25 years; these later mostly began as keratoses and small wart-like nodules. Some developed rapidly, that is in one month.

"The favorite points of origin were the lower lid (46 per cent.), the inner canthus, over the lacrimal sac (36 per cent.). The next most common point of origin was the upper lid and, least common, the onter canthus." His comparatively large series included "epithelioma primary in the lids and canthus or involving them from the skin in the immediate vicinity, nose, cheek and brow."

"Of the cancers of the lid, considerably over half originated in the skin of the lid just away from the cilia, the others starting in differently on the very margin of the lid or the base." The site at the lower lid near the inner canthus would seem to be favored as it is a more irritated and congested part of the lid. In my small series the growth was more marked extending from the inner

<sup>\*</sup>Read at the Annual Meeting of the Wisconsin Eye, Ear, Nose and Throat Specialists, Oshkosh, Oct. 8th, 1914.

canthus in the upper lid, and lid swelling obstructing the eye was that of a swollen upper lid.

If we may assume that the growth has its origin in the skin of the lids or lid margin it is a remarkable observation that the tumor extends into the orbit rather than to the skin of the face. The attachment is first to the periosteum of the border of the orbit and by direct extension backward involving the deeper structures of the orbit cavity, undermining the frontal sinuses and involving the ethmoidal labyrinth. The conjunctiva is involved at the time of the formation of a rodent ulceration. The cervical or parotid glands drain the skin of the face and were involved in 5 of the 88 cases of Fisher's. The internal maxillary and deep cervical glands drain the orbit and metastases may occur in this manner. Fisher states that "unsuccessful treatment seems to favor glandular involvement." but at the same moment admits that their pathological records do not indicate the character of the metastatic growth. It is however worthy of note that none of his patients developed enlarged glands, due possibly to the method of treatment, namely, excision. His patients were treated chiefly in three ways: "radical excision, excision with actual cautery of the wound, or simply actual cautery, the method employed depending upon the site of the growth and the degree to which it had progressed. Purely cutaneous growths, if small, were cauterized. Growths involving the border of the lid, but not adherent to the periosteum were excised and a plastic operation done to restore the lid. Where the growth was adherent to periosteum or had involved conjunctiva and orbit, or tear sac, actual cautery was added to excision. In cases of orbital involvement not readily accessible, an exenteration of the orbit, including the periosteum, was performed and the contents of the apex cauterized. For cauterizing large areas, the soldering iron was found preferable on account of the deep cooking given the tissues—a principle used in Percy's treatment of cancers. Involved sinuses were opened, curetted and cauterized in so far as possible."

I am not of the opinion that one can destroy all of the cancerous growth by the actual cautery, as I consider a clean excision more surgical than the cooking of a hot iron. Also, I do not believe in curetting the nasal sinuses under any circumstances, as it is possible with suitable curved knives

to excise the entire orbital or nasal walls of the sinuses.

Your interest in these patients rests upon what chance of recovery can be hoped for and the method of treatment which may give the most favorable results. Referring again to Fisher's recent report we find of the 33 epitheliomas of the lids and canthi, not including the orbit, 94 per cent. were cured by operation, that is, his records show no recurrence within one year. Of these cases not extending beyond the lids the percentage of two year cures is 84.

"When the orbit was involved, the percentage was turned about; 80 per cent. were not permanently cured. These included cases in which the sinuses also were involved."

The results by radium treatment of superficial epithelioma of the lids reported by Williams and Ellsworth is for the two year period 68 per cent. cured. "Turner cured 6 out of 9 completed cases of rodent ulcer of various parts of face and lips, or 66 per cent., time not stated."

I have had the opportunity to observe the effects of radium therapy in cancer of the larynx and seen it used as a post-operative measure in cancer of the superior maxilla and believe we should watch the history of radium carefully. The Roentgen ray has become so accessible and the application may be made in most communities by experts so that I have been inclined to put considerable faith in its efficiency. The results obtained in the series falling under my observation compare so favorably with other records that I feel that the X-ray is a very valuable agent. I cannot fully accept Fisher's statement that "the Roentgen ray cannot be regarded as a dependable agent in the treatment of epitheliomas, however useful it may be as palliative or post-operative measure."

The cases seen by me are old men, inmates of the North Western Branch of the National Home for Disabled Volunteer Soldiers. The tumors had involved the orbit and sinuses and arrived too late for the best results to be hoped for from the use alone of the ray. However the freedom from recurrence I believe to be favored by the continued post-operative applications of the Roentgen rays.

C. E. C., age 62, January 14, 1908.

Patient claims that many years ago he was stung by an insect and after several years a wart developed on the under lid of the right eye. A distinct growth was first noticed by him in 1900. Dr. Foerster was consulted and he advised X-ray treatment. This treatment apparently was of some benefit superficially, but when the outer canthus of the eye showed ulceration it was decided to discontinue the X-ray. On the 22nd of June, 1908, Dr. Black did a complete evisceration of the orbit under ether. The growth extended deep in the temporal side of the orbit involving the temporal fossa and the superior maxillary bone. The wound therefore showed a very deep depression on the temporal side of the face. It has granulated nicely and has been of very little inconvenience, with the exception that there has been some moisture at the nasal side of the wound. This was due to the fact that the nasal duct opened and emitted some moisture from the nose. On the 4th of January, 1910, I applied electric cautery into the nasal duct under local anesthesia thereby destroying the duct. This healed promptly and has given no trouble since. There is at times a slight scaling of the delicate skin which is attached to the bony wall of the orbit. The patient wears an eye pad for esthetic purposes which prevents the skin being as healthy as it would be if exposed to the air.

# E. G. T., age 68, June 10, 1911.

Has noticed for some time tumor on the inner canthus of the left eye. On the 10th of June, 1911, the left orbit was completely eviscerated under ether. Hospital notes show that the growth was extensive and the bony tissue of the nasal side of the orbit was involved. Following the operation the X-ray was used 10 minutes daily for four days and then five minutes every other day. On the 29th of September patient was referred to the general ward and came to the dressing room for treatment. X-ray treatment continued at intervals of about one week. On the first of Deccember the records show that granulation was forming slowly. the 1st of January, 1912, scarlet red ointment was applied. Records show on the 1st of February that some benefit was obtained from the use of the scarlet red. On the 28th of April, 1912, records further show that from the use of scarlet red granulations had healed on the nasal side and that further treatment of the wound was not necessary and the man was referred to his Company. He was seen by me from time to time and no further treatment found necessary. On the 9th of February, 1914, the man was brought into the hospital in a wheel chair having suffered a stroke of paralysis. The examination recorded is that the left orbital wound was then in very good condition and that there was no recurrence of the tumor 2 years and 8 months after the operation. The man died on the 11th of February, 1914, cause, cerebral hemorrhage.

# F. P., Age 72.

First seen April 7th, 1914. He first noticed 7 years ago, the appearance of a small wart on the bridge of the nose near the inner canthus of the left eye. He has seen a number of different physicians who expressed various opinions as to prognosis and the form of treatment. About six months ago he consulted the chief of the ophthalmological clinic in a neighboring state university who was of the opinion that the tumor would outlive the man. Four months later he reversed his opinion. At this time there was some ulceration and an operation was advised. When seen by me the left eye was completely closed and there was irregular induration of the upper lid with an ulceration of the inner fifth of the lid extending from the inner canthus to the edge of the nose. Vision was normal in both eyes and both eyes were apparently free from disease. On the 14th of April a portion of the tumor was removed under local anesthesia and the depths of the ulcerated area probed. The firm substance of the tumor extended deep into the orbit beyond the reach of the probe and it was decided that a complete operation could not be done under a local anesthetic. Microscopic examination of the tissue removed showed the usual basilar epithelioma. On the 28th of April, assisted by Dr. N. M. Black, a complete evisceration of the orbital contents was performed under ether. A small portion of the left eyebrow was permitted to remain but the incision extended to the outer and lower margin of the orbit and the nasal border of the orbit into a pocket beneath the left frontal sinus. The orbital plate of the ethmoid labyrinth was removed exposing a large communication beneath the middle turbinate and the nasal cavity. The periosteum of the orbital cavity was removed and the optic nerve and vessels severed as near the sphenoidal fissure as possible. The specimen showed an extension of the tumor along the nasal side of the sclera and in the proximity of the optic nerve, though the ocular structures could be dissected free from the growth. Apparently all of the tumor being removed, the actual cautery recommended by Fisher and Percy was not applied.

There has been no hemorrhage since the first day following the operation and the wound has healed smoothly and rapidly. It is, of course, early to make claims on this but the clean healing and freedom from symptoms now suggest that complete cure will take place. He was quite weakened by shock following the operation and it was thought best for the week or two after not to apply the Roentgen rays. He was kept in bed and the wound dressed daily. Iodoform packing was used and there has been no sign of excessive granulation in the wound.

# J. J., age 74, June 10, 1914.

Ever since he can remember, he has had a flat white wart on the inner canthus of the right eye. He first noticed this to grow seven years ago when he was confined in bed seven weeks due to some general injury. He was then treated for a few weeks with the Roentgen rays and the growth almost completely disappeared. He has noticed the growth progress more rapidly since December than any period before this. He complains now that the growth interferes with the exit of tears through the tear duct. The nose is apparently not affected by the growth. There is a deviated septum to the left, otherwise the nasal examination is negative. Vision on this date is right eye 6/XX left eye only the counting of fingers at a distance of eight feet, which is due to a scar, a leucoma, following ulcer of the cornea in the eye thirty years ago. Dr. Foerster was consulted and made a clinical diagnosis of epithelioma and advised X-ray treatment. He has been receiving the ray from a soft tube about once a week with the left eye fairly well protected. At times the treatments have been reduced to three or four days or when there has been reaction by way of increased hyperemia of the growth and adjacent skin the interval has been lengthened to once a week or ten days. On the 8th of September there was pronounced iritis of the left eye and increased milky whiteness of the cornea. Treatments were promptly discontinued and he was given the usual treatment for iritis. The inflammation of the left eye subsided in about

tcn days' time. After two weeks the X-ray treatment was continued keeping a sharp lookout for excessive reaction. The appearance of the growth after these treatments has changed considerably in height, less firmness of the induration, and lighter color. The man's general health is quite good and he is very comfortable, having very serviceable vision of the right eye. If one should do a complete evisceration of the orbit of the right eye he would then be nearly blind. The patient prefers to be comfortable the way he is and continue the X-ray treatment than to be handicapped by the operation. One is inclined in an event of this kind to rest his judgment upon the responsibility of the patient.

The other two cases with which I am familiar are private patients in the practice of my associate, Dr. N. M. Black, and Dr. Otto Foerster. The six cases are all quite typical. The sort that we may meet again and the result worthy of your consideration. Great dependence has been placed upon the use of the Roentgen ray. None of these cases were seen sufficiently early to warrant a plastic operation on the lids. This is one clinical point of extreme importance; I am inclined to believe that when we see a case of epithelioma of the lids which extends over the inner canthus that a plastic operation is not sufficient. The growth is pretty sure to extend into the orbit and probably involve the sinuses. The attempted plastic may furnish the specimen from which a microscopical diagnosis may be made and a complete operation performed soon after.

A sufficient number of cases treated by the X-ray alone are not yet tabulated to warrant this procedure. There is improvement by this means in the man whose other eye is so poor that to do an cyisceration of the tumor would have the effect of producing practical blindness and therefore we are at least giving the X-ray a thorough trial. While the knife is the agent of most nearly complete obliteration of a cancerous growth it must be admitted that metastases have occurred after operations and that the very operation may open up new avenues of growth. This feature is not the rule with epitheliomas of the lids as the cancer is the basal celled, rodent ulcer type whose chief characteristic is slow growth, freedom from metastasis and extension by direct progression into the orbit. Here there is hope from the X-ray, and apparently hope to be realized.

COLLES' FRACTURE.\*
BY OTHO FIEDLER, M. D.,
SHEBOYGAN.

It was just one hundred years ago that Colles, of Dublin, in 1814, first described the fracture that bears his name; and now, at the close of the century, we must acknowledge that the last word on the subject has not yet been spoken. If Dr. J. B. Murphy is correct in his statement that from 85% to 92% of Colles' fractures result badly as at present treated, it is altogether meet that the matter should once more and yet again engage our attention.

We know that the fracture described by Colles is but one of many varieties of fracture at the wrist joint, all of which are designated by the same appellation, and, in the hands of some surgeons, are still assumed to have the same pathology and to require the same treatment.

Colles' fracture is always a palmar pressure fracture, never a flexion fracture, and in typical form is never seen except as the result of an impact driving the carpus toward the bones of the forearm. With the advent of the gasoline engine, there was added another cause than fall on the dorsally flexed hand for this fracture; and a considerable portion, about one-half of our cases, have this back kick of the crank as the etiological factor. The fracture produced by the crank which has been jerked from the hand and swings around the circle to strike the dorsum of the wrist, is not a typical Colles' fracture, but rather a fracture of the shaft or shafts of the bone from 1½ to 2½ inches above the articular surface.

The anatomy and physiology of a joint are always complex, and the more complex the greater the range and exactness of motion. It is not surprising then that the physiology of the wrist joint is not fully known. We have still to determine the exact motions of the carpal bones. In its anatomy, Dwight, of Harvard, has made a recent contribution in his study of the variations of the hand and foot. Among other things, he shows that the scaphoid is at times two separate bones, which is of interest in this discussion.

It is well to remember that the shaft of the radius expands suddenly into the cancellous extremity of less resistant bone about one inch above the articular surface; that the cross section of the radius at this point is triangular, with the base anterior and the apex posterior, and that the least dense tone tissue is not in the center of the bone but posterior to this.

The mechanism of Colles' fracture is best determined by a study of cases in which the force has not been sufficient to produce the typical fracture. As Treves has pointed out: "Partial or incomplete fractures are valuable as showing the real mechanism of fracture production; they tell where they begin and the nature of the stresses." As the hand is abducted and pronated, the main stress falls over the lateral ligament. Since the ulnar border of the radius is held firmly by the radio-ulnar ligament, it resists the strain and the radial styloid gives first; the median edge of the epiphysis, closing last, leaves a weak joint here. The capsular ligament is continuous with the periosteum, and if torn, the bone is not broken. But Ross has shown that the ligament is stronger than the bone, so it pulls out the bone surface and causes by-lines of stress, a sprain fracture across the impact receiving area.

We have first the splitting or crushing force transmitted from the carpal bones which received the impact. The radius, if the force is sufficient. yields then at its weakest point, which may break up the causative force; but if it is greater, a cross strain is exerted at the insertion of the capsular ligament, especially on its anterior aspect with the hand in dorsal hyper-extension, when a continuation of the force drives the lower fragment into the shaft of the bone. Finally, if the force is not now expended, breaking up its lines leads to comminution and impaction of the fragments. The outer part of the bone suffers more than the inner, because the latter is held fast and supported by the radio-ulnar ligament and the fibro-cartilage; and the posterior part suffers more than the anterior. because of the triangular shape of the bone. The force being exerted parallel to the base and about half way to the apex, with the area of less dense bone tissue toward the apex, the apex yields more readily.

The typical radius fracture is an impacted fracture of the lower end of the radius, from ½ to 1½ inches above the articular surface. The lower or distal fragment is displaced backwards, and proximal volarward. The impaction is of the dorsal

<sup>\*</sup>Read at the 68th Annual Meeting of the State Medical Society of Wisconsin, Oshkosh, Oct. 8, 1914.

rim of the proximal fragment into the fractured surface of the distal. Likewise, the outer or radial side of the upper fragment is impacted into the lower fragment. The fixed point of the fibrocartilage causes also some rotation of the lower fragment.

Such typical fractures are seen in 41% of 151 cases reported by Knox and Salmond as occurring in adults (over twenty years) with united epiphyses, and almost none in 64 cases occurring in children with ununited epiphyses. But in addition to the typical fracture, we have many varieties and not a few complications. The fracture lines may be not transverse but run obliquely from the articular surface to the radial side of the cancellated extremity, splitting off the styloid process. It may be transverse and in addition the splitting force of the impact of the shaft may divide the extremity to its articular surface, causing a T fracture. Or the impact may split off the ulnar side of the articular surface with its sigmoid cavity. In other cases, the distal fragment is comminuted and extensively crushed and impacted.

In nearly half the cases of Colles' fracture, the styloid of the ulna is broken off and in a small number (3%) the shaft of this bone is broken, this is especially likely to occur if the hand is abducted when it received the impact.

With greater crushing force, for example, in falling from a great height, one or more of the carpal bones, usually the scaphoid, is broken, and occasionally, a metacarpal bone. Such complications are found in from 10% to 13% of cases.

In the young, before epiphyseal union, the typical Colles' fracture is seldom observed. In my experience, most fractures in children before the fifteenth year are fractures of the shaft 1½ to 2½ inches above the articular surface; and in those from fifteen to eighteen years of age, epiphyseal separation takes place.

In children, too, the ulna is more frequently injured than is the case with adults, about 55% to 60% of cases, and more frequently in the shaft than in the styloid process, in the proportion of at least two or three to one. Here, too, because of the large amount of elastic cartilage present, the carpal bones are not so frequently broken as in adults; less than one-fourth as often.

To make the diagnosis of Colles' fracture, it is necessary to have only: history of sufficient trauma, swelling, with or without deformity, and a tender point in the extremity of the bone. Many an error in diagnosis has resulted in that the surgeon, following text book advice, has looked for deformity, not always present, has looked more especially for crepitation, which is almost never to be elicited until the impaction is freed, or looked for increased and abnormal mobility, which is never to be found.

The patient comes to the surgeon with the history of a fall upon the outstretched hand, or a back kick while cranking a gasoline engine. He will probably support the injured hand with the sound one. On examination one notes swelling, marked on the volar surface just back of the fold of the wrist, and a puffiness on the dorsal surface over the exterior tendons. All motion is restricted and painful. Examination of our landmarks reveals that the radial styloid, which, with the hand in supination, should be entirely distal to a line drawn from the tip of the ulna at right angles to the radius, is more proximal and probably on a level with the ulnar styloid, or even above it. The examining finger, as it palpates the bone, may feel the break in its contour; or, if this is not possible because of subcutaneous fat, the patient's face will disclose the line of fracture because of the pain clicited by pressure at this point. This last symptom is an important one and of great diagnostic value in determining both the presence and position of the line of fracture.

If the bone is much impacted, the consequent shortening gives the characteristic silver fork deformity, and if further impaction of the radial side has resulted, the hand is abducted and the wrist widened. The fingers are flexed and motion in them causes pain. Crepitus and increased mobility are so very seldom seen that it is useless to look for them.

Fracture of the styloid process of the ulna gives tenderness over the tip of the bone. Fracture of the scaphoid produces great tenderness on pressure in the anatomical snuff box. A certain proportion of cases, especially the sprain fracture, or first degree fracture, in which the ligaments have torn away the bone but have themselves withstood the strain, are not to be diagnosed except by the X-ray.

According to Ross and Stewart, such fractures constitute about 15% of all Colles' fractures, and are, unfortunately, very frequently overlooked.

It is well to remember that the displacement in fractures at the wrist is not due to pull of muscles or tendons, as is the case in fracture of the shaft. The displacement in the classical radius fracture is the result of the direction of the crushing force and the nature of the crushed bone. The older writers on this subject would have had us believe that the lower fragment was drawn up and backward by the combined action of the supinator longus and the flexors and extensors of the thumb and carpals, and tried to differentiate between sprain and fracture by the observation that the fractured fragment reduced, if not held in place, returned to its abnormal position. I believe this is not true. A fractured radius perfectly reduced remains reduced and in place. If it does not do so, it is not properly replaced. One would conjecture that in oblique fractures such redisplacement might take place. But since the cancellated bone of the head of the radius extends only about one inch above the articular surface, and the force producing the fracture is applied in the line of the bone, the shaft being better constructed to withstand the stress, is simply driven into the cancellated tissue of the head and an oblique fracture, at any rate, one of much obliquity, is not possible.

Sprains of the wrist are quite rare. Better diagnostic methods demonstrate that most injuries formerly supposed to be sprains are fracture sprains in the adult and juxta-epiphyseal sprains in children, and to be treated as fractures.

The advent and perfection of the X-ray has made it possible to positively and accurately diagnose fractures. While Holtzknecht warns us that a small percentage of fractures escape notice in the skiagram, the number is so small as to be negligible. The patient has the right to expect that we give him the benefit of whatever means are available for reaching definite conclusions. Possibly in the country it may be very difficult to secure radiographs of fracture cases, but in the city, there can no longer be any excuse for the surgeon who does not give his patients the benefit of the more exact method of diagnosis. From economic and cosmetic points of view Colles' fracture is a most important surgical condition. Bad results reduce the wage earning ability of patients and leave them with unsightly hands. As a safeguard to the surgeon, the X-ray is invaluable as a means of preventing damage suits and when suit has been brought, puts into the hands of the defendant demonstrable evidence for the jury.

Comminuted fractures are most difficult to diagnose by any other method and though nature is

most tolerant of bone fragments, provided she can maintain the joint function, it is only by the skiagram that we can be assured that the joint surface is intact.

There are few conditions with which Colles' fracture can be confounded. Sprain of the wrist is very infrequent; when present, the disability is slight, painless and lower down and motion is painful in only the direction opposed to the torn ligaments. Sprain gives no thickening or sensitiveness of the end of the radius.

Fracture of the scaphoid results from falls upon the anterior flexed hand or blows upon it, and may be accompanied by fracture of the radius with forward dislocation of the lower fragment. The extreme painfulness of the fragments is diagnostic and if the semi-lunar is displaced, as sometimes happens, the loss of extension of the middle finger and its great sensitiveness help to determine the injury.

The prognosis of Colles' fractures, judging from the statement previously quoted, is poor in from 85% to 92% of cases. Some fractures give good results without any diagnosis or treatment; but the above figures show that some do not.

In children, the fracture high on the shaft and epiphyseal separation give very good results, both as to function and appearance. In older subjects, with the line of fracture in the expanded cancellated tissue of the end of the radius, unless the impaction is broken up and the reposition of the fragments exact, there will be enlargement of the lower end of the bone.

Functionally, children usually give perfect results, because since the bones are more elastic and less dense, the expanding force does not produce comminution with fragmentation into or involving joint surface. In older persons, there is commonly a falling off of ten to twenty degrees of extension and flexion, often also of pronation and supination. Abduction and adduction are about normal.

The styloid process of the ulna, once separated, never reunites, according to Lilienfeld, of Leipsic, who reports that in all his experience with many cases skiagraphed after a lapse of months and years, he has never seen one in which the pieces, once separated, ever reunited. This, however, does not hinder motion nor cause cosmetic defect.

The fingers should not be restricted in motion, nor the hand flattened, if the proper management is secured.

The treatment of Colles' fracture has been foreshadowed in what has already been said. Having made the necessary examination under an anesthetic, and, whenever available, having a radiograph as a guide, the first fundamental and most important step is to break up the impaction. This is the condition sine qua non of a good result. It is always advisable and nearly always necessary, to anesthetize the patient, and I believe that most careful, conservative surgeons make it a rule to employ at least the first stage of anesthesia to free impaction and reduce the fracture. Without this means, one, besides causing the patient needless pain, is very likely to be less thorough in his work and, moreover, the muscle pull and the resistance of the patient make it impossible to secure as accurate results. Only when the fragments are not impacted and are exactly replaced will healing take place ideally and the period of disability be comparatively short. In adults, when such reduction has taken place, and fragments are exactly aligned, ten to fourteen days are sufficient to secure such firm union that further support is unnecessary.

To break up the impaction and replace one must not use the old method of grasping the hand and forearm and making traction. No amount of pull will secure the desired result. But with the one hand grasping the forearm and upper fragment and the other the wrist and lower fragment, use leverage to the ulnar side and then dorsally flex the wrist until you hear crepitus. Now push with the thumb and fingers the fragments into place and let the hand and wrist fall into the flexed position. If there is still displacement, reduction was not accomplished. Perfectly apposed fragments do not redisplace.

One may now experiment with splints ad libitum—use straight or pistol-shaped ones, use those of wood or tin or mache, or what not, and still secure good results.

Personally, I have brought with me from the Lorenz clinic the conviction that the ideal splint is one moulded from plaster of Paris. I do not advocate the full circular plaster bandage, but either the 3-5 circular, of Murphy, or a posterior and anterior moulded splint.

The fingers should not be immobilized. As Hoffa says, no other joints endure a continued immobility so badly as the wrist and finger joints, since here even a few weeks are sufficient to leave behind

contractures and ankylosis which cannot be corrected.

The inflexible, straight posterior splint by pressure on the dorsum of the hand, tends to flatten the same, and by causing reactionary inflammation, loss of power of extension of the fingers by contraction and adhesion between the tendon sheath and the tendon or the surrounding tissues. Such a splint, too, by exerting continued pressure upon the prominence of the ulna, causes a slumping forward of the same with widening of the wrist and deformity. It is well to cut out an area of the splint at this point. This is the more necessary if the triangular fibro-cartilage is torn loose and the ulna left more free to move. A pad on the volar side of the ulnar extremity tends to keep the prominence in proper position.

In fractures of the scaphoid or other carpal bones, so long as the fragments are in place, they heal quickly and perfectly, with no evil results; but if displacement of a fragment of scaphoid occurs, this fragment had best be removed. One cannot be sure that a fracture exists in the scaphoid when the skiagram shows a line of separation, for in a small number of individuals, the scaphoid is two separate bones, with the articular surfaces in the line of the usual fracture. Other symptoms beside the X-ray findings must decide the matter.

Limitation of motion can be largely prevented and stiffness avoided if passive motion is begun early and active motion not too long delayed. The former advice, to wait weeks before beginning massage and motion, was erroneous and led to much permanent loss of function. In cases otherwise properly treated as to freeing impaction and replacing, passive motion may be begun at the end of the first week or ten days, and active motion in two weeks. This prevents adhesions within and without the tendon sheaths. I would urge also, especially in elderly subjects, the frequent and long continued use of hyperemia by hot air, to improve the blood supply and waste removal, as having the same object and result.

Atrophy of the bones of the carpus and metacarpus, so frequently observed and formerly supposed to be due to immobility of and pressure upon these bones, is probably due to an imperfect reduction. Lilienfeld states that he has never observed this atrophy except where displacement of fragments remained.

An occasional, but, fortunately, not frequent

complication is the neuritis of one or more branches of the nerves of the hand, the result of trauma or pressure. The resultant paralysis, though obstinate, ultimately disappears under electric treatment and massage.

Old ununited Colles' fractures call for open treatment and either plating or nailing of fragments. As others have pointed out, the proximity of the fracture to the joint is no contra-indication. I would suggest, especially in separation of a large fragment of the styloid of the radius, that we resort to nailing, as carried out by Dr. Murphy, and which in the one case in which I tried it, gave excellent results.

To sum up:

- 1. Colles' fracture is a fracture of the lower end of the radius, from  $\frac{1}{4}$  to  $\frac{1}{2}$  inches above the articular surface.
  - 2. It is always an impacted fracture.
- 3. In more than 50% of the cases, it is complicated, most often with injury of ulna.
- 4. To examine and reduce the fracture, the patient should be anesthetized. The X-ray is a most valuable adjunct, and, when available, should be used.
- 5. The most important point in treatment is to break up the impaction.
- 6. Perfect reposition of fragments gives ideal healing and results.
- 7. A perfectly reduced fracture gives no redisplacement.
- 8. Immobilization should not be for more than ten to fourteen days.
- 9. Stiffness and contracture are the result of bad treatment.
- 10. Poor results in 85% to 92% of cases is evidence of ignorance or carelessness on the part of surgeons, and admonishes us to increase our knowledge and eare in the management of Colles' fracture.

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# FRACTURES IN THE REGION OF THE ELBOW.\*

BY W. E. FAIRFIELD, M. D.,

GREEN BAY.

Fractures in the region of the elbow joint are peculiarly interesting to the surgeon, because of their proneness to cause interference with the normal function of the limb, and the conspicuous deformity which results from failure to recognize and reduce gross displacements.

It is not an unusual experience even now to meet a physician who persists in putting up a fractured elbow in a semiflexed fixation splint, for the express purpose of securing that position permanently in an expected anehylosed joint, thus following the teaching of the old school, that reduction of many of these fractures is impossible, and that anchylosis is not a remote probability; this too, after the feeblest of effort upon the part of the surgeon to ascertain the true condition. Indeed the promulgation of such a doctrine tends to make the surgeon eareless, and he is apt to assume without reason, that the fracture under treatment is irreducible and can therefore be left in statu quo without further serious effort to correct the deformity.

I confess with due humility that I myself have been guilty of this serious and blameworthy error, and it is only in recent years that I have made some atonement for my culpable neglect.

There are two principal reasons for the tendency of physicians and surgeons to take an erroneous view of this aecident: 1,  $\Lambda$  failure to recall the character of the elbow joint; 2,  $\Lambda$  lack of knowledge of the landmarks in the normal elbow.

<sup>\*</sup>Read at the 68th Annual Meeting of the State Medical Society of Wisconsin, Oshkosh, Oct. 8th, 1914.

If the physician will remember that in fractures in the vicinity of the elbow certain definite lines are apt to be followed, and, in addition, these lines of fractures rarely lead to the disorganization of the joint, then the work of reduction becomes much simplified, and while the task is always formidable, it is almost never impossible. Interference with the motion of the elbow joint is usually due to encroachment of a fragment upon the flexion angle, and not to any disorganization of the hinge of the elbow itself.

The fractures which are most apt to occur in this region are: 1, Fracture of the internal condyle.

In this injury the displacement of the fragment is downward and forward from the pull of the arm flexors. When the break is at the line of the epiphysis, the ulnar nerve is usually injured, and serious consequences may follow.

2, A more serious injury usually caused by direct violence is fracture extending from the supracondyloid ridge obliquely downward and outward through the olecranon fossa and trochlea into the joint.

The fragment together with the ulna will rise above their normal level, producing an inward deflection of the arm. As the natural deflection of the forearm is toward the radial side, this deflection to the ulnar side becomes a serious deformity, for it interferes with many of the simple and common uses of the limb, for instance, the carrying of weights by the side, and the conveyance of food and drink to the mouth. The nature of this fracture, therefore, should be well impressed upon the mind of the surgeon and in reducing it care should be taken to adjust the fragments as nearly as possible, and then to carry the forearm to the radial side, as in the normal arm.

3, The external condyle is seldom separated though it is a surgical possibility. The common line of fracture is through the capitellum and commencing at the supra-condyloid ridge.

The same force which commonly causes a Colles' fracture, may produce this one. It is wise, therefore, to examine the elbow carefully, where there has been a fall upon the palm, remembering that while direct injury is the common cause of this fracture, yet a certain percentage may result from a fall which might be expected to produce quite another and different lesion.

4, The "T-shaped fracture" is one in which we

we have a transverse epi-condyloid separation together with an intra-condyloid split. This injury is commonly due to direct violence, and produces the characteristic gun-stock elbow and lateral angulation, in addition to the other signs common to fractures in the elbow region.

5, Separation of the lower epiphysis of the humerus may occur before the sixteenth or seventeenth year at which time bony union becomes established. After that age violence sufficiently severe to induce separation of the epiphysis, is commonly productive of fracture instead.

When this accident takes place, the surgeon should be careful not to mistake it for a dislocation, because he may easily be misled from the fact that the internal condyle, having a separate center of ossification commonly remains uninjured and in its normal position, and the anatomical picture on the ulnar side of the arm gives a strong impression in favor of a dislocation of both bones of the forearm forward. A careful examination, however, will disclose the true nature of the lesion.

This fracture is easier to reduce than it is to hold in position. The treatment recommended by the junior Hutchinson, namely, "Keep the arm fully flexed until union takes place," ordinarily solves this troublesome problem.

6. Fracture of the oleceanon usually takes place from direct violence, and the symptoms are so characteristic as to be readily interpreted. The displacement is of course upward, and the treatment is suture of the fibrous covering of which, fortunately, there is an available abundance.

Supra-condyloid fracture of the humerus, while it might properly be considered a fracture of the shaft, and thus be omitted in the consideration of fractures near the elbow joint, yet is so commonly mistaken for other forms of fracture involving the joint itself, that one cannot profitably ignore it.

This fracture is almost always transverse so far as it affects the anterior surface of the humerus, but careful observation will develop the fact that the line of separation on the posterior surface of the bone lies higher than does the same line on the anterior surface, and the shelving favors an anteroposterior displacement. The common observation is to find the upper fragment lying anteriorly above the fold of the elbow, and the lower fragment pulled upward and backward by the triceps muscle.

I have purposely omitted so far, any reference

to the X-ray as a means of diagnosis because I know that fairly good results can be obtained without this valuable agent, which unfortunately it is not always practicable to have at hand. The medical man living in the country, the young medical man if you please, whose scanty hoard has been exhausted by the demands of a modern medical education, and who is not able to equip his office with a Roentgen outfit, should not be asked to send his fractured elbow to the city or to his better equipped neighbor unless he has been negligent in his study of the normal arm. His knowledge should be sufficient to enable him to safely and successfully handle a fracture which in the hands of the ignorant or unskillful will only lead to disaster. When it is possible to examine with a fluoroscope a lesion near or involving this joint, supplementing this with radiographs made from two planes separated , by 90 degrees, then this should be done, and the examination should be repeated whenever an additional adjustment has been deemed advisable.

With all of these precautions, unfortunately, one will fail to escape deformity and interference with function in isolated cases, and we should all exercise especial vigilance over our tongues when we are inclined to criticize the efforts of others, remembering that when we travel the road of fractures we do not travel far without coming to a turn, and that each of us is liable to need the loyal support of our fellow workers. Very faulty reductions may give good functional results, and good reductions may be followed by poor functional results. For this reason, if for no other, we should not pass upon an injury in this region, after an examination at a date remote from that of the traumatism.

Without seeming to criticize a man so famed and experienced as Arbuthnot Lane, I would hesitate to accept his advanced view that "all fractures should be treated by the open method." When the ordinary surgeon shall have perfected such a technique that he is able to say he has eliminated the possibility of accidental infections, when he is able to establish beyond a question of doubt the fact that the patient has normal resistance, just as he can at the present time demonstrate by the use of the X-ray the amount and character of the displacement, then we shall all feel that we should no longer depend upon a method that is neither exact nor scientific, but that we should have recourse to that method which permits of accurate approxima-

tion and firm and stable fixation. Then we shall have eliminated the possibility of non-union, for it is a well demonstrated fact that bones accurately reduced and firmly fixed, unite kindly and almost if not quite universally.

At the present writing one should not attempt the open method who is not equipped with the necessary instruments, proper mechanical and professional skill, and an institution in which to do work with the assurance that it will be surgically clean.

There are two injuries to this region where open work may unhesitatingly be undertaken by anyone possessing ordinary skill and equipment. One is in fracture of the oleceanon and the other is displacement of the head of the radius. An abundance of fibrous tissue makes it possible to insure secure union by means of ordinary chromicized catgut suture. In all open work we should avoid the use of drains and antiseptics, particularly if metal is to be left behind.

Plates and metallic sutures should be buried as deeply as possible and we should use no more material than is absolutely essential to hold the fragments in position. The presence of wrist drop in a reduced or unreduced fracture, calls for investigation into the condition of the musculo-spiral nerve. Circulatory interference in this region is rare, though thrombus may form with more or less disastrous results.

If in spite of all our efforts, the union is vicious and impossible, the course still is open to excise the joint.

Finally, I suggest to all who are called upon to reduce fractures in this region, advise that a fluoroscopic or radiographic examination of the injury be made as soon as you have reduced the member. A delay of a day or two, awaiting the subsidence of pain, will do no harm, and if the patient is living some distance from the point where he can have this done, it may even be an advantage to wait. The information thus obtained may not help you to better the reduction, but it will give you knowledge which you can impart to your patient and upon the accuracy of which there can be no question. A prognosis based upon such information is more apt to be correct and should a bad result be unavoidable, then the patient will be more resigned to the inevitable, knowing as he will, that everything that skill and scientific investigation could furnish had been appealed to in his case.

# THE THYROID IN PREGNANCY.\*

BY K. W. DOEGE, M. D.,

SURGEON TO ST. JOSEPH'S HOSPITAL,

#### MARSHFIELD.

There probably is at present no more interesting topic to the physician from a scientific as well as from a clinical standpoint than the subject of the secretions and functions of the ductless glands. Because of its superficial location the thyroid was one of the earliest to engage our attention. Before the researches of Gull and Ard in 1873-75 and those of Kocher and Reverden in 1885 no more important theories were held as to its function than that of Wharton, who thought that its principal object was to give more beauty and symmetry to the neck. The literature that has accumulated on this subject during the last twenty-five to thirty years seems almost endless. In spite of this, however, we are still considerably at large concerning the function of the thyroid gland and opinions differ widely and are often distinctly opposed to each other.

Perhaps the most accepted and acceptable theory so far seems to be that the secretion of the gland has some definite relation to normal metabolism. The next most acceptable assumption is that in some way or other the thyroid secretion eliminates certain toxins from the system or develops a toxin in itself. There probably is a certain amount of truth to both these theories. So much is certain, though, the thyroid gland is essential to health and life. The congenital absence of the thyroid and its secretion results in slow metabolism, in dwarfish growth, physical and mental, in myxedema and cretinism, and some forms of its hypertrophy and over-production of secretion cause rapid oxidation of the tissues, loss of flesh, and eventually lead to death, as in exophthalmic goitre.

The normal thyroid with its two lobes lies on either side of the trachea and is barely palpable and its outline is not visible. For practical purposes it may be safe to say that a visible thyroid in all probability is a pathological, a diseased thyroid. As against this statement the fact may be mentioned that in certain persons and under certain conditions the thyroid may increase in size, congest, and thus become visible in its contour without actual disease being present as far as can

be ascertained, and as instances the enlarged thyroid during menstruation and during pregnancy might be cited. Leaving these instances for the present out of our consideration we will probably all agree that a visible thyroid in children before maturity, in the male at all ages, and in the female past the child-bearing period would by all of us be considered a pathological process.

The enlarged thyroid of the young girl just entering upon maturity and the congested thyroid of the pregnant woman are commonly observed by all practitioners. The absence of any thyroid congestion in the maturing young man and its nonobservance in the sexually active male are only noticeable by contrast. Its presence in the one and the absence in the other can be construed as a priori evidence that the thyroid gland, besides its action on metabolism, is in some way in close relation with the female reproductive organs. The enlarged gland during the rutting season of some of the lower animals would also point that way, and the statement that amongst certain non-civilized tribes there exists the custom of measuring the young bride's neck after the nuptials to ascertain whether effectual sexual relations have resulted. would make it fairly certain that the relation of thyroid enlargement to the sexual life of the female has been observed even by the non-civilized hordes, the enlarged neck being considered conclusive evidence of successful cohabitation.

If we subscribe to the theory that the thyroid secretion is necessary to growth and metabolism in general, it is easy to understand the hypertrophy of the gland in the adolescent girl. The comparative suddenness of the maturity and ripening process of the young female would probably require an increased amount of thyroid secretion and necessitate a consequent physiological congestion and hypertrophy of the gland. For the same reason the double metabolism of the pregnant woman, that of the mother and fetus, would lead to thyroid congestion and enlargement to fulfill the demand for more secretion.

Nor are those who see in the gland a toxin destroying organ at a loss to explain this phenomenon from their point of view, for the increased metabolism of rapid sexual growth and the double growth of gestation, means additional waste and formation of toxins to be neutralized by increased thyroid secretion, eventuating in physiological congestions and enlargements. Nor is it at all surpris-

<sup>\*</sup>Read before the Wisconsin Surgical Association, Milwaukee, May 5th, 1915.

ing that such hypertrophy and increased secretion should occur. Does not increased demand always cause increased activity and corresponding enlargement everywhere? We know the heart enlarges during pregnancy. So do the kidneys. The entire form and every feature of the woman changes. The digestive apparatus, the nervous system, yes, the entire body works under increased force and strain. Why not the thyroid whose function is so intimately connected with growth and metabolism? I would regard its functional hypertrophy in this light, as an expression of increased function of all the organs, but not as a special feature for the occasion and safeguarding of pregnancy.

There are those who believe that failure of the gland to enlarge and to furnish an increased amount of secretion during pregnancy is a definite cause of some of the toxemias of pregnancy and that the occurrence of non-hypertrophy in this condition is to be looked upon with apprehension. Thompson in an interesting article in Surgery, Gynecology & Obstetrics for August, 1913, says: "Clinical evidence supports the theory that physiological hyperactivity of the thyroid gland forms a valuable safeguard against the toxemias of pregnancy." However his conclusions are mainly based on one clinical case and a number of animal experiments and the opinion of others.

Let us see to what extent facts bear out this assumption. In the Bulletin of the Lying-In-Hospital of the City of New York for June, 1913, Markoe and Wing published a resume of 1586 cases of pregnancy which they have examined in respect to enlarged thyroids. Of this number only 132 or 8.3 per cent. had goitres. Of the 852 primiparae in this series 83 had thyroid enlargement and of those 20 began before pregnancy, leaving 63 out of 852 as taking their origin during pregnancy or 7.2 per cent. Of the 734 multiparae of this series 49 cases showed hypertrophy. Of these latter 13 began before pregnancy, leaving 36 cases or less than 5 per cent., or only 6 per cent. of all eases, dating their enlargement as beginning during pregnancy. It would seem that this is entirely too small percentage upon which to base the belief that hypertrophy of the thyroid is always present during pregnancy physiologically, and that nonenlargement of the gland should be considered pathological. On the contrary it would rather disprove that assumption.

Graff of Halle examined 654 cases in the second

half of pregnancy. His material evidently was drawn from a goitrous district, for 319, or 49 per cent., had goitres. However, only 21 said the enlargement began in pregnancy, making this condition accountable for but 9 per cent. These figures coincide fairly with those of Markoe and Wing.

The above statistics would show that pregnancy leads to enlargement of the normal thyroid in but a relatively small number of cases, 6 per cent. and, if increased thyroid secretion in pregnancy is a necessity, that the normal thyroid is fully equal to the task without resorting to perceptible hypertrophy to accomplish its task.

These same statistics also show that the effect of gestation upon thyroids already diseased and enlarged is decidedly more pronounced and frequent. The diseased thyroid almost invariably enlarges still further during pregnancy to again shrink in size after the puerperium.

Thus Graff reports 49 per cent. of thyroid enlargements in his pregnant women and Seitz finds as many as 85-90 per cent. and Nicholson 81 per cent. It is of course evident that these statistics must differ according to whether the district in which the material for observation originates is goitrous or non-goitrous. It can readily be understood that the hypertrophied pathological thyroid probably is unable to supply enough secretion for the increased demand without extra effort and additional compensatory hypertrophy. Whether or not the thyroid enlarges in order to take care of a possible toxemia of pregnancy is a question still undecided, though seriously advocated by many.

Seitz inclines to the belief that the theory of the thyreogenetic origin of the toxemia of pregnancy is untenable. Markoe and Wing express the conviction that until the function of the thyroid gland in the human economy is more understood than it is at present, deductions should not be drawn.

In the light of the above statistics of over 2200 cases it would appear that physiological enlargement of the normal thyroid gland during pregnancy is not as universal as had been assumed by some and that if in the course of pregnancy and in the presence of a goitre, measures should become necessary that would aim at diminishing the size of the thyroid and result in its diminished secretion, no exorbitant fear need be had of inducing

a toxemia of pregnancy by so doing, that might result seriously to the patient or child.

I now wish to relate the history of a case, the treatment of which presented problems that led me to a close study of the behavior of the thyroid gland during pregnancy and to record its treatment and favorable outcome.

Mrs. P., 33 years of age, with seven children, was in her eighth pregnancy and when first seen in the eighth month of gestation. She came to the hospital in a highly nervous condition with voluminous eructations of gas, a severe harsh cough and great dyspnea. Her face was deeply congested and her neck was greatly enlarged, the results of an immense vascular goitre. The external veins were as thick as a finger and she was unable to lie down without dyspnea.

The patient was born in Canada and has two sisters suffering from large goitres and her grandfather had five sisters with goitre.

Her previous medical history was negative except that her goitre which had existed since the birth of her second child had become repeatedly and increasingly more enlarged during successive pregnancies, diminishing a few weeks after labor to a size fairly prominent, but not sufficiently large to cause her appreciable physical distress. During the previous pregnancy the goitre had grown to immense proportions, her neck measuring 36 inches, so she said. At the time of her last labor her dyspnea had been very pronounced and any effort at bearing down would cause such vascular swelling and congestion of the gland as to increase her dyspnea to an apnea causing her to faint. The labor in consequence was prolonged to the duration of days and had to be instrumental without the aid of an anesthetic. She thoroughly dreaded the coming confinement and came to the hospital for assistance and relief.

Physical examination showed the heart and lungs to be normal, urine negative, thyroid greatly enlarged, the neck having a circumference of 29 inches, very vascular. No pronounced hyperthyroidism. About one week ago her sister-in-law died, upon which she became very excited. She began to belch up gas, the goitre enlarged still more, her cough increased and dyspnea resulted. Rest in bed and a mild sedative soon improved her nervous condition. The cough and dyspnea however persisted and the gland enlarged in size. To all appearances she was approaching term under

conditions similar to the last pregnancy, only more worried and frightened.

After she had been in the hospital about three weeks I resolved to remove the goitre. This was done on Feb. 26, 1915, under ether anesthesia with a preliminary dose of morphine and atropine. The operation presented no special difficulty and the entire gland was removed, leaving small portions at the entrance of the fourth arteries and the parathyroids and some thyroid tissue with the posterior capsule of the gland. She made an uninterrupted recovery and at no time were there signs of a threatening premature labor. The urine was examined repeatedly during her stay at the hospital and was always found normal. After about sixteen days she left the hospital and was confined normally four weeks later with the aid of a midwife only. At no time during the six weeks intervening between the operation and the puerperium nor after, was there any deleterious effect as a result of the operation. The pathological examination of the specimen showed a colloid goitre, with beginning changes to Graves' disease.

Seitz states that cases similar to the one just reported are comparatively rare. Simple goitres generally enlarge during pregnancy, only a few, however, cause compression symptoms. If this occurs strumectomy is indicated. Of the 52 cases collected by him the maternal mortality was 2 per cent. and 6 per cent. resulted in abortion, a result of the shock of the operation.

The behavior of the thyroid gland in Graves' disease is variable. Slight forms of hyperthyreosis are common in women and if pregnancy occurs the symptoms are generally exaggerated in perhaps 60 per cent. Pregnancy cannot be considered as specifically injurious to them but they need careful watching, plenty of rest and occasional sedative treatment. Strange to say, some few cases are improved during gestation. They might be explained in this way: that in those particular cases pregnancy does not act particularly as a stimulus to the gland and that in consequence its output of secretion is not augmented. Its former hypersecretion, however, is now utilized by the demands of the double metabolism, in that way benefitting and improving the patient. Where the disease is aggravated however, rest, hygenic surroundings, avoidance of nervous strain, the administering of iodine in some form are indicated. The use of Rogers' and Beebe's cytonic serum has not been

particularly successful and Markoe and Wing are probably correct when they say: "The relation of the thyroid to the physiology and pathology of pregnancy shows a diversity in its clinical manifestations which is most puzzling and difficult to analyze." Before definite deductions can be drawn from them, further investigations from the physiological laboratory as to the general function of the thyroid and its relation to the entire organism will be necessary. Until that time, its many clinical manifestations can scarcely be properly interpreted.

If severe symptoms should arise, the use of the ice bag, absolute rest, and sedatives are indicated. In the severest forms termination of the pregnancy must be considered or operation upon the gland decided upon.

In conclusion I would state:

- 1. That the influence of pregnancy on the normal thyroid gland is noticeable by its enlargement in about 8 per cent. of cases.
- 2. That diseased thyroids, pre-existing goitres, are most decidedly aggravated by pregnancy.
- 3. That strumectomy is indicated where obstruction to breathing arises.
- 4. That the relation of the thyroid gland to the toxemias of pregnancy is understood but little and that the treatment of these toxemias along this line has been far from successful.
- 5. That Graves' disease more often is aggravated than benefitted by pregnancy.

# AN ANALYSIS OF OBESITY WITH OUT-LINE OF TREATMENT.\*

BY LUELLA E. AXTELL, M. D.,

### MARINETTE.

Obesity is an expression of unbalance between the consumption of nutrient material and oxidation in the tissues. In the perfectly functioning buman organism there is an automatic adjustment of these processes which should maintain a perfect equilibrium, but within the limits of what is considered normal wide variations in the relation of food intake to energy production occurs. The

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problem of these metabolic differences is far from simple and while a computation of calories on the basis of the weight and activity of the subject, selecting the correct relative proportions of protein, carbohydrate and other nutrient elements, makes a fairly good basis for the calculation of the amount of food that can be advantageously utilized in a particular case, yet there are individual characteristics to be taken into account especially when considering certain anomalous types such as are often exemplified in the obese.

Many classifications of obesity have been suggested, though none are perfectly satisfactory. A study of the subject according to cause, however, offers the best understanding, and is the best guide for treatment. We therefore note exogenous and endogenous forms, albeit recognizing that pure types of either are rare, but that in the majority of cases both exogenous and endogenous elements operate, each augmenting the other to the production of the undesirable end.

It has been said that obesity covers a multitude of sins and of the types of exogenous obesity this may be true. They include those caused primarily by 1. Overfeeding or improper feeding (including both food and drink); 2. Lack of exercise.

These two familiar causal elements are usually associated and act from without, though they strike in with a vengeance, and no doubt are operative, to some extent, in the majority of cases. They are far from being, however, the *summa summarum* as is too often taken for granted. Obesity may originate solely from these exogenous causes, but even such cases become mixed forms as they advance.

Endogenous obesity, on the other hand, originates from some constitutional or functional defect, either inherited or acquired, whereby the organism is unable to maintain the normal balance between food intake and energy production. And as the metabolic processes involved are still the subject of warm controversy and in their study we are continually running into untrod paths, I shall present only so much as is supported by good authority, and shall endeavor to show that my statements are consonant with facts.

Endogenous obesity has been known to follow: infectious diseases, poisoning, frequent pregnancies. prolonged lactation, sexual abuses, castration, climacteric.

This group suggests that the altered metabolism

is the result of an exhaustion of certain glands of the body, whose internal secretions are vital to the normal balance of metabolic processes. The presumption is further strengthened by the observation that overgrowth of the pituitary, under-activity of the thyroid, and prolonged suprarenal medication are productive of obesity, which leads us to the belief that a perfect knowledge of the internal glandular secretions is the key to a better understanding of metabolic processes, and until we have such knowledge some of our problems must remain unsolved.

Cretinism, that typical expression of thyroid insufficiency, presents obesity as a cardinal symptom and thereby proves the right of the thyroid gland to be considered a factor in endogenous obesity. Sajous' theory that the iodine content of thyroid secretion serves as an activator of combustion of tissue through the phosphorous content of tissue just as the presence of iodine causes ignition of phosphorous outside the body is a reasonable explanation. It follows that oxidation is unfavorably influenced by too little of the iodine bearing secretion in the blood. Furthermore, though as yet we are not able to prove definitely all the details of relationship, the interdependence of the different internal secretions is sufficiently established to convince us that they are all concerned in metabolism.

But because a disturbed balance of internal secretions may be productive of obesity, it does not follow that all obesity, even of the endogenous variety, is to be attributed to this cause. It is not unlikely that differences exist in the cell protoplasm of different individuals. It is a matter of knowledge obtained through experiment that considerable variation exists, within what is considered the limits of health, in the oxidation power of different individuals, and, without presenting any symptoms of hypothyroidism or insufficiency of other internal secretion, so far as we are able to interpret, a patient may display sluggish oxidation processes sufficiently marked to account for the gradual development of obesity. Now, while this apparently protoplasmic feature may have root in the unbalance of these not too well understood internal secretions, we must bear in mind that it is more than possible that the individual character of the cell protoplasm plays some part in governing the oxidation process. Indeed, we must recognize that there are, not only one, nor even two, but three points on which failure of combustion may hinge:
1. Balance of internal secretions; 2. Protoplasmic characteristics of cells (these two we have already discussed); 3. The power of glycogen formation (perhaps most frequent point of failure, which we will now consider).

Under the usual conditions in health practically all the carbohydrate of a meal, immediately on being carried in the form of glucose to the liver by the portal vein, is converted into liver glycogen. If the storage capacity of the liver is exceeded, this glycogen is reconverted into glucose and carried to muscle, there to be converted into muscle glycogen; but if the glycogenic power of the liver is impaired some of the glucose passes through unchanged. When the glycogenic function of the liver is impaired, that of muscle is also depressed. Moreover, glucose that has not been converted first into glycogen by either liver or muscle, is not available for energy. Neither the liver cell nor the muscle cell has the power of burning glucose in its original molecular form, hence the necessity of the intermediate glycogen.

Experimental observation of diabetics bears upon this fact. On the presumption that more exercise would burn some of the sugar consumed, even advanced diabetics at one time were advised to exercise as much as possible, but since making careful tests, such treatment has been abandoned. Instead of lessening the glycosuria, as would be the case if free glucose were burned, sugar in the urine of the advanced diabetic is never diminished, and often is increased by exercise. The patient is able to burn only so much glucose as he is able to convert first into glycogen, and the beneficial effect of exercise in mild diabetes is because of its stimulation of glycogenic function. The process of oxidation, therefore, waits on that of glycogen formation. The association of these functions was long ago observed, even before it was proven why impaired glycogen formation always means depressed oxidation. Whether impaired oxidation processes directly affect glycogenic function is not so certain, but at any rate, they go hand in hand. Oxidation and liver and muscle glycogenic function rise and fall together.

To illustrate glycogenic impairment as a cause of obesity let us select a subject favorable to our purpose and observe his metabolic processes in so far as they shall relate to his fat storing tendencies. Our subject is an individual with inherent slug-

gishness of oxidation and glycogenic function, within the limits of what would be considered normal, but let us say crowding well on to the limit that borders on the abnormal. Such an individual will incline to physical indolence, because oxidation is always a fraction of a step behind demands. For the same reason his appetite is excellent. Liver and muscle cells are constantly just a little sugar hungry, because they are ready for it just a little before it is properly elaborated for their use. Therefore he enjoys his food keenly, and thinks about it a good deal. The millions of little cells are constantly calling to him. The food he takes is magnificently cared for by the digestive apparatus working at top notch efficiency under the stimulus of a high degree of epicurean enjoyment. Consequently, there is small waste, the very maximum of nourishment being extracted and presented to the intestinal epithelial cell for resorption.

As the glycogen formation is the process under observation, we select the carbohydrate as it appears in glucose form in its transport to the liver. Arrived there, it should be changed rapidly to glycogen and for the most part gradually reconverted into glucose and sent on to the muscles to serve their purpose. But the process of glycogen formation does not quite meet the exigencies of the generous carbohydrate intake, which not only the appetite but the tissues demand, therefore, a little unchanged glucose slips through after every meal. As this is not available for energy, what happens? The areolar cell is stimulated to activity by the heightened sugar concentration of the blood and the free glucose is transformed to fat and deposited. Our subject must cat still a little more to satisfy the demand for energizing material, and again a little fat is deposited. This may be so slight a matter in the beginning that no account can be taken of it, and if the subject leads an exceedingly active and stressful life, which tends to accelerate oxidation and glycogenic processes, the tendency to depressed function may not manifest itself in fat accumulation for many years, or until life becomes less strenuous. Usually, however, these cases assert themselves sufficiently to excite attention in the early thirties, if not before.

It may be well to call attention at this point to the fact that failure of glycogenic function does not necessarily involve the failure of fat formation. For sugar to be utilized by the liver and muscle for energy, the intermediate glycogen stage is a necessity, but this intermediate stage is not essential to the formation of fat, as exemplified in fatty diabetes with its marked failure of glycogenic and oxidizing functions, while the patient, notwithstanding, piles up fat from the free sugar in the blood.

Now in time as fat accumulation continues, it is further augmented by conditions which grow out of itself. We must remember that fat never travels from, but always toward the liver, that fat in the tissues has a tendency to migrate to the liver, in fact, some physiologists still claim that all stored fat must go to the liver for oxidation, and in case of depressed glycogen function it tends to remain there, for the liver is depressed in fat burning power proportionately to its impairment of glycogenic function, and therefore tends to become more and more a fat reservoir. Further, it is a well known fact that any fat in the liver markedly interferes with its power to manufacture glycogen. Other diseases of the liver may be very extensive and glycogenic function remain unimpaired, but let ever so little fat be deposited there and the glycogen elaborating machinery of the liver begins to balk. As this function is thus further impaired, the organism suffers more from lack of energy, the patient is more hungry, eats more food, glycogen function is still more impaired, etc., etc.

And so there are wheels within wheels, each one further encircing and imprisoning the poor obese subject. His fires are low, he lacks energy, he hungers, he eats, he gets too little energy from his food, his body cries for more, he eats more, more fat is formed only to cripple further the functions already impaired. Every turn of the circle enmeshes him further, piles on the fat and intensifies the craving for food. Finally, his case may become so extreme that he thinks of food almost constantly, his appetite becomes a torture, an obsession. He feels fairly wolfish at times.

Since a better knowledge of metabolism has obtained, we know that the apparent loss of will power manifested by the diabetic in the management of his diet is not loss of will power in fact. His self control in other matters is not impaired. His insatiable appetite, especially for carbohydrate, is but the result of the sugar hunger of the tissues. So it is with the extremely obese. When the patient is refined and intelligent he will often disclaim a hearty appetite and deny that he eats

much. Sometimes he deceives himself, sometimes he is ashamed and eats secretly to satisfy the inordinate craving that will not down. I have repeatedly explained to my patients as well as I could to laymen, why very fat people are so hungry, taking it for granted that we are all alike, and confessing my own experience as a basis, and I have never failed to get their admission of this subjective symptom, when they are relieved of the rear of criticism or ridicule or the implication that they are gluttonous. I do not mean to imply that all cases are of this class, but to suggest the decided predominance of the type.

Undoubtedly in some cases the psychological is one of the primary causes. People who are pleasure loving and self-indulgent are liable in time, to become obese, given a good digestive apparatus, and no organic disease which interferes with nutrition; but, as I have tried to show, the ease-loving and the fondness for food, often are but the expression of conditions beyond control and of imperfect physical processes instead of gross mental ones. Now if this is understood by the patient early, obesity may be prevented. Exercise will stimulate glycogenic function not yet depressed below normality, while the appetite has not gotten beyond control. But after the vicious processes have become an established metabolic habit, education of patient rarely, by itself, effects a cure.

In childhood, extreme activity stimulates oxidation to its utmost, and any excess food can be cared for through growth, but with the growth well over, if conditions are favorable, the insidious process begins, slowly at first, then faster, as effect increases cause, until the obesity becomes extreme, or some part of the overtaxed organism either breaks down, or becomes so crippled that nutrition cannot be maintained properly, when naturally the obesity declines.

And by "favorable conditions" I refer not only to those we have just reviewed, but to the many other more commonly considered causes. I draw the picture of glycogenic obesity in detail, because I believe it is the type most commonly met, and least often recognized. No matter what the primary cause, after a time, the circle described usually establishes itself.

A factor that contributes to the continuance of obesity is a moderate dilatation of the stomach. It stimulates the taking of too much food because one in eating never feels quite satisfied until the

stomach is comfortably filled, so, the habit being established of eating a certain amount, no matter how much it exceeds requirement, that amount is demanded.

The history of many obese individuals of apparently normal habits discloses that at some time in their lives there was a period of indulgence or inactivity, and from that time obesity dated. A return to the usual habits did not reduce the extra adipose but it continued on the contrary to increase somewhat because fat begets fat, as has been shown.

Improper selection of food is another frequent cause. Nature has wonderful adaptive functions and for a long time, given organs at high efficiency, an individual may be able to resist the abnormal storage of fat even though carbohydrate, or fat, or both, be taken in excess, but sooner or later, on such a diet, the majority of individuals will become obese. Bread and sweets, the most frequent transgressions, are so concentrated that the individual who makes them his chief article of diet is bound to eat too much in quantity. Education as to food values is an important factor in the relief of this class of patients.

The relation of fat in the diet to the production of obesity has excited much discussion. It has been claimed by some that the eating of fats does not result in fat storage, and a great many misguided people have added to their burdens substantially by giving ear to this theory. It seems strange that anyone with a reasonable knowledge of fat metabolism, could credit the statement that taking of much fatty foods does not conduce toward the storage of fat. Under ordinary circumstances only a certain definite, limited amount of fat can be burned in a given time. This is drawn from food, if fatty food is supplied, if not, from the stored fat. So the fat taken protects that stored. Furthermore, when we appreciate the facility with which glycerol and fatty acids recombine to form fat we may well ask what becomes of the excess food fats if they are not stored? The experimental work done on dogs whereby they have been made mutton dogs by feeding exclusively upon mutton, that is, their fat became mutton fat instead of dog fat, conclusively proves that ingested fat is stored. Ebstein, the originator of the idea that fat is not stored from diet fat, formulated a system of slow reduction in which fats were allowed freely and carbohydrates reduced to a minimum. The diet which he allowed totaled but fourteen hundred

calories a day for a man, weight not stated; but as the subject was impliedly obese it would not be unfair to consider two hundred pounds as a standard, and as we know, the adaptive functions of the body would so operate on a diet of but fourteen hundred calories per two hundred pounds, or even one hundred and fifty pounds, with reasonable activity, to cause gradual reduction, though the diet were nothing but potato, almost a pure carbohydrate. My statement in regard to the limited power of the organism to burn fat must not be construed to apply to people living in the frigid zones, for they tolerate and utilize enormous quantities of fat. This suggests the potency of thermic or climatic influences. A continuous summer climate, if not intensely hot, aggravates obesity; and for the same reason, luxurious heating systems, making summer in our homes the year round, have the same tendency. Oxidation processes are stimulated by exposure to cold, and climatic or thermic conditions should be added to the causes of obesity. They belong in the same class as lack of exercise, because alike they are exogenous oxidation factors.

The effect of excessive drinking of fluids on the accumulation of fat is well known. hydration process, digestion is more rapid if food is taken in liquid form or mixed with much fluid during the process of eating than when the necessary water must be extracted from the tissues; and when digestive processes are accelerated, a greater proportion of the food taken is absorbed. Excessive drinking also tends to dilatation of the stomach, which favors over-eating; drinking at meals enhances the pleasures of the table by freshening the taste between bites and therefore further stimulates the appetite. Moreover, the habitual taking of more water than is required, long continued, actually water-logs the tissues so that a person weighs more by virtue of his excessive water-content. This is an especially disadvantageous condition when, as is frequently the case, obesity is associated with disease or weakness of the cardio-vascular system. The heart load is materially increased both by the large amount of liquid which must be transported through the blood vessels, and the diffusion of fluid into the tissues, pressing on the capillaries and consequently obstructing the blood stream.

The effect of alcohol on metabolism has been so much discussed that a few words will suffice us, and its influence in producing obesity is so familiar as to need no emphasis. Alcohol in large amount presumably depresses oxidation processes and thereby spares body fat. It also inclines toward gluttony and therefore stimulates the storage of fat. Heavy beer drinkers take such enormous quantities of fluid that the additional factors of dilated stomach and excess of water intake are added to that of the taking of alcohol.

There are individuals who eat sparingly, exercise vigorously, do not overload with water, nor take alcohol to any extent, select their diet intelligently, are well, not troubled with inordinate appetite, and vet are exceedingly plump. These individuals are rare, much rarer than you would think if instead of analyzing each case carefully, you credit the claims of all those who in your judgment might be considered too fat; but such individuals do exist. They rarely grow exceedingly obese, however. They have a very economical machine and such high degree of functional activity, that the small excess of fat does not operate to depress glycogenic function below a good degree of efficiency. Such cases are not to be considered pathological unless the obesity becomes extreme, when it assumes the glycogenic form.

Obesity is to be considered pathological if it interferes with efficiency or has developed to the point of predisposing to disease. It has been rightly claimed to be one of the symptoms of premature old-age, and may predispose to many conditions of failing function and disease familiarly seen in advanced life. While the subject is so large that it is not permissible at this time for me to take up the discussion of the relation of obesity to diseased states, I wish to call attention to the fact that this impaired glycogenic function which we have discussed at length, and which conduces toward, and is induced and aggravated by obesity, is a cardinal feature of diabetes, and reviewing our thought it is patent how extreme obesity with its progressively failing glycogenic power may develop readily into fatty diabetes. It naturally follows that many cases of diabetes might be prevented by an early rational reduction of obese subjects.

There is too much of a tendency to make light of obesity, even on the part of our profession. We are apt to think chiefly of its cosmetic disadvantages and look upon the obese as merely self-indulgent individuals, rather subjects for amusement or ridicule than serious consideration. As physicians we too often satisfy ourselves simply by advising

them to eat less and exercise more. Now just what does that mean to the patient? Remember that in order for the stored fat to be drawn upon he must never eat enough to supply the energy he uses, for he grows thinner only by the amount of tissue fat burned. This means that he must be more or less hungry every moment of his life, for days, weeks, months and even years if he is very fat, and when he exercises more, he is fortunate if his appetite does not increase. Is it any wonder he doesn't do it for long enough to get satisfactory results? It requires tremendous self-denial to reduce one's fat gradually simply by eating less and exercising more, and very few will persist. Frequent lapses retard progress, at best slow, the patient grows discouraged, and gives up; or if he is inclined to extremes, he starves himself, at the same time exercising beyond reason, till he becomes half sick, and then decides it is not good for the health to reduce, or perhaps he takes up with some fakir to his sorrow.

The questions naturally arise as to whether the patient can best be treated in an institution or in his own home; whether rather rapid reduction should be undertaken, or he be reduced slowly. Theoretically, a gradual reduction of a few ounces a week continued over a long period seems to be a most desirable, even ideal method, but no matter how enticing a theory, if it does not work out satisfactorily in practice, it is valueless. When I first became interested in this work, I attempted to do reduction from my office, the patient remaining in her home, and I must confess it was anything but a brilliant success. Now and then a patient will progress satisfactorily, at least for a time, under such treatment, and a few specialists like Gaertner and VanNoorden have done successful work in reduction in this way, but with the great majority of patients the great majority of physicians will meet almost universal disappointment, as I am sure many of you can attest.

The treatment is far from being so simple as is usually conceived, each case must be differently treated, the individual, not the obesity, must be the point of attack. Moreover, it is rarely possible to watch a home patient carefully over a long period of time, while the physician, if not in close touch with the patient, cannot influence his self-control and enthusiasm, and it is not a matter to excite enthusiasm, a few ounces a week. There will be fluctuations in weight that will make the patient

doubt his progress, and he will in most cases weary of the impositions placed upon him, and if he be of the glycogenic type, as are the majority, he will find the restrictions so irksome, for a protracted time, that he will be sure to abandon the treatment.

As to the more rapid home reductions I have only to say that they are hazardous, and the carrying out of this method has contributed its quota toward the disfavor in which the treatment of obesity is regarded in certain quarters. The patient cannot be sufficiently watched nor adequately controlled. I have had occasion to treat a number of cases of procidentia uteri that resulted from such treatment, because there was lacking, as always in the home treatment, the necessary amount of accessory treatment to strengthen the muscles and build up the general health. patient, too, will grow so hungry that he will in spite of himself often transgress. Elimination cannot be attended to properly with the patient at long range and the reduction course is liable to be followed by one of the large class of derangements dependent upon imperfect elimination. Acetonuria, even, has occurred, which never could happen under careful institutional treatment. The more the subject is studied the more it becomes evident that the treatment of obese states should be institutional where the patient can be absolutely under control, where his diet can be selected for him, and where it is possible by accessory treatment to make him comfortable and properly safeguard his health.

I feel that I owe it to the medical society of which I am a member to outline my form of treatment, though I wish to emphasize that no two cases are treated exactly alike. Every day the heart and urine are examined, the blood pressure taken, and once a week the blood examined, treatment being frequently modified according to indications.

Mental. Patient is educated in food values and instructed as to harmful effects of continued indulgence in wrong habits, appealing to his intelligence and pride, and building up his self control.

Exercise. Patient is led to enjoy exercise. This can be done only when he has companionship and exercises are simple and fun making or agreeable. Voluntary exercise is augmented by the use of the Victor-Bergonie apparatus (ergo-therapy), the easy chair treatment, which exercises the muscles

without volition, hence with little fatigue. Exercises in deep breathing are no small part of the treatment, and an earnest effort is made to establish the habit.

Diet. Food is prepared so that it is attractive and bulky in appearance, thus satisfying the esthetic and psychical elements of appetite, and at the same time it is so selected and prepared that the caloric value is low. Usually eight to fifteen hundred calories, according to conditions presenting, with reduced fat and carbohydrate, and increased protein and protein saving content, to protect the protein of the tissues. Foods rich in elements that facilitate oxidation and the splitting of fats, and also those that assist bowel function and yet do not fatten are given freely.

Drinking is limited at meals, but the normal quota is given in twenty-four hours.

Massage is valuable by rendering fat more easily oxidizable, and by stimulating circulation in the parts manipulated. It is especially good for local reduction, only useful, however, if properly done and in connection with other treatment. On full diet, or if wrongly applied, it may increase deposition of fat in the parts massaged.

Thermic influences are taken advantage of, e. g., by baths, showers, and alternation of cold with exercise in order to stimulate oxidation.

Electricity in the form of autocondensation is used to stimulate metabolism.

Drugs I do not use except as they are indicated by *special* symptoms. The indiscriminate use of thyroid or other iodine preparation may do much harm, and the patient should no more be given such medicines for all kinds of obesity than he should be given a hypodermic injection for every sort of pain. Employment of preparations of internal secretory glands are permissible when distinctly indicated by the symptoms of the patient, but at the present state of our knowledge, should, I believe, be administered with great care. Sometimes it is easy to build a fire but hard to put it out

Sweat baths are useful for a time in treating water-logged patients, but they will not continue to reduce unless fluids are withheld, a procedure not compatible with good treatment. They assist elimination, however, which must be stimulated on account of the excessive fat and protein combustion. Exhaustive catharsis is not to be tolerated, though a certain amount of saline administration

is wise during rapid reduction to forestall acetonuria.

Hunger troubles wonderfully little. The patient is kept busy every moment. His meals appeal to him as ample. The massage and electrical and Bergonie treatments cause his fatty tissue more readily to offer itself for energy so that the little carbohydrate he takes is sufficient to appease the tissue hunger. A patient, too, will enthusiastically cooperate, and for a short time willingly suffer some deprivation if he sees substantial results. When every morning the scale tells him he has dropped one-half pound, one pound, even two pounds of his burden, and at the same time he feels well and energetie, he is willing to do anything that shall continue the happy result.

As to the amount of reduction permissible, there is no hard and fast rule. Treatment should never be pushed to the detriment of the patient and careful watchfulness must be the guide. Cases will vary greatly, but unbelievable results may be attained under proper care.

As illustrative, I reduced one case in six weeks 20% of her weight without the patient feeling discomfort, nor was her health in the least imperiled, On her discharge she stated that she had never felt so well. Gastro-intestinal disturbances, to which she was accustomed, had subsided; acne, with which she had been troubled for years, had disappeared; wandering pains in the muscles, which had been considered "rheumatism" were gone; and tenderness in the pelvie region, of six years' standing, following an extra-uterine pregnancy, was relieved. I do not claim that all these benefits were the direct result of decreased fat, but rather that they resulted from the treatment which was employed for the purpose. Nor would I undertake to reduce every patient 20% of her weight in so short a time. In fact, at present writing, I would consider it inadvisable except in an occasional case.

And right here it may be apropos to state that a most careful selection of cases is imperative. Obesity treatment is not to be thought of in some diseases, though others are helped by it. On admission, patients are subjected to a rigorous physical examination, including roentgenological examination of chest. The family history, too, is carefully probed, for no one with a tuberculous lesion or from a tuberculous family should submit to a reduction cure. My experience has led me to the conclusion that a short, judicious, closely

watched course of institutional treatment is the best form for moderate obesity, and the best beginning in extreme obesity. At present I consider six weeks about right for such a course, and if necessary or desirable, as in the case of extremely obese patients, after a year's interval, it may be repeated. Such a course clears the liver of so much fat that glycogenic function is much improved, therefore hunger is not so insistent nor the pernicious fat storing tendencies so pronounced. A fair training in diet selection is possible, the capacity of the stomach can be reduced to normal, and the patient gets such satisfactory results that his enthusiasm is aroused, and he is encouraged to persist in a better way of living, especially as he now knows his transgressions, and has been given a start toward good habits, while his improved condition has made self-control possible.

In conclusion I wish to say that in all reduction work "Safety first" should be the motto, and also that a careful scrutiny of the objections to rapid reduction of obesity reveals that they are based on the presumption that this necessity is disregarded and that wrong methods are used, methods not compatible with common sense and familiarity with physiological processes. It is a matter of common knowledge that a man may go on a hunting trip of three weeks, lose 15 or 20 pounds. and come back in fine fettle. The reduction had contributed toward his improved condition because the causes of his reduction were along lines that promote health. A rational obesity treatment must be on the same basis, and at the close of such treatment, the patient, far from being injured, will find his health vastly improved.

# EFFECT OF HEAT AND COLD UPON THE LARVAE OF TRICHINELLA SPIRALIS. BY HENRY NEWTON WINN.

UNIVERSITY OF WISCONSIN.

# MADISON.

But little work has been done to ascertain with any accuracy the effect of heat upon the encysted larvae of Trichinella spiralis. Ward gives a temperature of 55° C. as being sufficient to cause the death of the parasite, and also states that low temperatures have practically no effect upon the vitality of the larvae.\* Leuckart gives a temperature

of 62° to 69° C. as necessary to kill the larvae, and states that a temperature as low as —20° to —25° C. of three days' duration does not cause their death.\*\* Ransom, in a recent series of experiments, gives evidence which indicates that low temperatures may be effective in killing encysted larvae.\*\*\* No other authentic reports of work upon this problem have been found, and it is, therefore, the aim of the experiments described in this paper to determine as accurately as possible the point at which it is necessary to heat meat containing the larval trichinas in order to effectually destroy the parasites and render the meat innocuous.

Mice and guinea pigs were used as experimental animals. Five individuals were used in each set of experiments. One in each case was used as a control, being fed fresh, unheated meat containing the larvae of the parasite. Infected meat was teased apart under the microscope and a piece of such size that it contained about fifty worms was fed to each one of the animals. In case of four of the animals of each set, the meat was heated to a desired point and maintained at that constant temperature for fifteen minutes, while the control reccived fresh, unheated meat containing the same number of larvae (fifty). An incubation period of six weeks was allowed and at the end of that time the animals were killed and samples of meat taken from the diaphragm, intercostal, and shoulder muscles of each animal.

In the first experiment five mice were fed infected meat from a guinea pig, which had been heated at 45°, 48°, 50°, 53°, 54°, and 55° C.

TABLE I.

Showing results of feeding mice trichinous meat which had been heated to various temperatures.

	Average Number of Worms Per Sample					
Temperature (Centigrade)	Experimental Mice					
	A	В	С	D	Average	Control
45°	87	62	83	71	75.7	83
48°	61	58	65	72	64	62
50°	66	85	74	71	74	75
53°	38	51	83	42	53.5	64
54°	24	31	14	19	22	77
55°	0	0	0	0	0	82
55°	0	0	0	0	0	73

<sup>\*\*&</sup>quot;The Parasites of Man," Leukart; 1886, 157-158.

<sup>\*&</sup>quot;Animal Parasites of Man," H. B. Ward. (Out of print.)

<sup>\*\*\*</sup>Science, N. S. Vol. XXXIX: No. 996; 181-183.

The results (Table I) show that up to 53° C. there is apparently no effect upon the vitality of the worms. At 53° C. the vitality seems to be slightly reduced, but the results are variable; at 54° C. still further reduced; while at 55° C. no worms develop in any case.

In another series of experiments, some of the infected meat was left exposed out of doors away from the sun from February 8th, 1914, to February 22nd, 1914, inclusive, a total of sixteen days, at an average mean temperature of —18.8° C. (—2° F.) with a minimum of —25° C. (—13° F.) and a maximum of —12.2° C. (10° F.) The meat was thus allowed to stay at a temperature varying irregularly about —17.8° C. (0° F.). Five guinea pigs were fed this meat, and in no case could any Trichina be found when they were killed and examined about a month later. Four more guinea pigs were fed some of the meat, and when examined six weeks later no worms could be found.

According to these results, it would seem that, contrary to the accepted view, cold of about -17.8° C. over a number of days effectually destroys the life of the encysted larvae. This is established without doubt by a series of experiments with low temperatures carried on by B. H. Ransom of the United States Bureau of Animal Industry.\* He found that "most of the parasites survive when exposed for as long as six days to a temperature ranging between 11° and 15° F. (-11.7° to -9.4° C.). On the other hand, when exposed to a temperature in the neighborhood of 0° F. (-17.8° C.) the larvae of Trichinella quickly succumb." He further found that only one out of over 1,000 larvae examined was able to survive an exposure of six days at such a temperature. In further series of experiments he found none of the larvae alive in meat which was allowed to remain at a temperature of about 0° F. for three days, allowed to thaw, and kept at 0° F. for another three days, and out of 301 larvae from meat kept at 0° F. for three days, only five showed any signs of life. In those cases where the larvae were not all dead, the remaining ones seemed to have suffered a severe loss of vitality and showed only faint signs of life.

He obtained similar results from tests of trichinous meat upon guinea pigs. Those fed infected 3, 6, and 7 days respectively showed no Trichinae when killed and examined. However, a pig fed meat from the same source which had been exposed to a temperature of 11° to 15° F. for six days showed Trichinae when killed and examined three weeks after feeding.

If these preliminary results are substantiated by

meat which had been kept at about 0° F. for 2,

If these preliminary results are substantiated by more comprehensive experiments, they will become of great commercial importance. Trichinosis in man is, in many localities where raw pork is eaten, a very common disease, often resulting in death. In Europe many of the countries maintain a system of microscopic inspection at considerable cost to the government and with only a minor degree of efficiency, because the best possible inspection is far from being an absolute safeguard. Government inspection, moreover, is only applied to those products which are expressly prepared under federal supervision to be eaten raw, and is of no avail for products prepared at home or even in the smaller local establishments.

The results of these experiments suggest the possibility that refrigeration may be substituted for microscopic inspection, with a much smaller cost and a higher degree of efficiency, to all pork products prepared under government supervision and in the larger packing houses. In case of any pork products prepared at home, or which might for any reason be suspicious, heating the meat to a temperature of 55° C. (131° F.) for a period of fifteen minutes for each pound, to insure that the meat would reach that temperature all through, would effectually safeguard the consumer from any danger of trichinosis.

# **ABSTRACTS**

LIGHT: ITS USE AND ABUSE. Ranly, J. (Lancet-Clin. v. 112, p. 397). From the point of view of life insurance Ranly endeavors to show in how far the matter of the use and abuse of light is intimately connected with the energy expended by the eye in its functioning. Anything which can prolong the life of the individual will redound to the benefit of the company. The saving of energy incidental to the avoidance of eye strain will certainly increase the efficiency of the individual and lead to longevity. The principles covering the correct use of light and of proper illumination are set forth. In nose and throat operations he recommends for greatest efficiency the dark room with dark green walls which are almost black with a dull finish.

<sup>\*</sup>Science, N. S., Vol. XXXIX; No. 996; 181-183.

CHOKED DISC IN DISSEMINATED SCLEROSIS. Tschirkowsky, D., Kasan. (Klin. Mon. f. Aug., 53, p. 527). Although disturbances of the visual paths in disseminated sclerosis are very frequent, optic neuritis has been observed only nine times, as T's review of literature shows. T. reports the clinical history and post mortem examination of a peasant, aged 25, who suffered from motor aphasia and paresis of the right arm and both legs. The pupils were equally dilated, did not react to light and on convergence; paresis of left internal rectus, no nystagmus, edematous optic neuritis with relatively slight prominence of discs, and some hemorrhages near the left disc. The patient died two days after admission.

The optic nerves in their whole extent and the chiasm presented changes characteristic of disseminated sclerosis, and inflammatory, which are described in detail and illustrated. The bloodvessels were enlarged and their walls infiltrated with hematogenous elements, lymphocytes and plasma cells. The affection of the nervous tissue, especially of the nerve fibres was the dominating process in the visual path: disintegration of the medullary sheaths, denuded and partially altered axis cylinders, a large number of grillshaped, respectively granular, cells in the glia of the optic nerve and chiasm. This corresponds with the foci of disseminated sclerosis in other parts of the nervous system, which are characterized by the destruction of the medullary sheaths of the nerve fibres. The prominence of the discs was 2-3 mm. the tissue was separated by edema, the veins were very much dilated and filled with blood. This was especially interesting as so far no anatomical observation of an edematous neuritis existed. The edema of the disc was probably due to the above mentioned changes of the bloodvessels combined with impeded blood and lymph circulation.

C. ZIMMERMANN.

ON THE GROWTH OF INTRAOCULAR SARCOMAS ALONG THE SURFACE. Pindikowski, J. (From the eye clinic of Prof. Th. Axenfeld in the University of Freiburg. Klin. Mon. f. Aug., 53, p. 516). Aside of the usual forms of spreading of malign tumors through the blood and lymph vessels a third form (seminium, dissemination) is known, which the author discusses in detail with the report of an illustrative case. A woman, aged 59, presented in the left iris a blackish brown rugged sarcoma of the size of a pea near the lower ciliary margin. The remaining iris was bluish grey. An iridectomy was performed, but the tumor broke into soft black masses, which partly remained in the eye. Within six months a relapse had set in apparently starting from an incarcerated portion of the iris, and extending through the wound along the limbus under the conjunctiva. From the lower nodule a ringshaped sarcomatous infiltration of the anterior portion of the ciliary body, root of iris and spaces of Fontana, i. e., a ringshaped sarcoma, had developed.

Just as the exterior tumor utilized the cornea as base for its growth, the intraocular tumor spread on all available surfaces, the anterior and posterior surfaces of the iris and lens and troughs of the ciliary processes, in form of more or less large nodules. The inner surface of the cornea however remained free. It seems as if the healthy endothelium resisted the spreading of the tumor. The surface growth is to be explained by active migration of cells.

C. ZIMMERMANN.

INFLUENCE OF SANTONIN AND DIGITALIS ON COLOR SENSIBILITY OF HUMAN EYE. Schulz, H. (From the pharmacological institute in the University of Greifswald, Deutsche Med. Woch., v. 40, p. 996). It is a well known fact that the ingestion of santonin and santoninate salts elicits xanthopsia and parallel with this diminishes the perceptibility for violet. Schulz argued, that if xanthopsia from santonin is due to reduced function or paralysis of the violet perceiving parts of our visual organ, santonin must according to the biological fundamental law of Rudolf Arndt, in correspondingly diminished doses increase the sensitiveness to violet. His quantitative investigations fully confirmed this. Under the influence of santoninate of sodium o2, blue and red behaved like violet, green reversely to red, as was to be expected from the experiences with violet and yellow. Similar investigations with tincture of digitalis, after which B. Behr in 1859 had observed green blindness, had the same results, viz., increase of sensitiveness to green by small doses, 1/2 drop, decrease by large doses, 10 drops. Observations with red showed the opposite behavior.

C. ZIMMERMANN.

THE CHIEF SOURCES OF LIGHT WITH REGARD TO HYGIENE OF THE EYE. Broca and Laporte. (Annales d'oculistique, March and April, 1914, Klin. Mon. f. Augenh. 53, p. 298). From photometric comparison of the different sources of light and their actions on the pupil, after images, and subjective sensations, Broca and Laporte found the best illumination at from 20 to 30 lux. Especially glaring sources of light at the periphery of the visual field must be avoided. All hygienic requirements are best fulfilled by indirect illumination. For practical results simple photometers are the best, e. g., the apparatus of Ritschie.

C. ZIMMERMANN.

REPORT OF COMMITTEE ON CONSERVATION OF VISION. Brose, L. V. (Ind. State Med. Assoc., v. 7, p. 437). At the instance of the Indiana State Medical Association some fifty talks were given to about 5,000 persons, according to the report of Brose, on the conservation of vision, dealing with prevention of blennorrhoea neonatorum, trachoma, drinking, and inhaling of the vapors, of methyl alcohol, industrial accidents, taking care of the eyes of children during school life. Brose says that there is pressing need for the continuation of these lectures, and much good will follow. The manufacturers offered every help to have their men instructed during the noon hour, and the men have invariably been highly appreciative of these efforts to help them in the preservation of sight.

C. ZIMMERMANN.

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#### **EDITORIALS**

#### HONOR ROLL.

The membership all over the state should be interested in the changes in the list of the Hundred Per Cent. Club of the State Society. It will be remembered that this consists of those county societies which have reported as many members in good standing as they had last year. Those marked with a star have increased their membership over last year. Are you interested in your county society? Do you want to see it in this list of progressive counties? If your county society is not in this list ask why it is not. Find the reason! Help your county officers to put it there next month!

Chippewa Langlade Columbia Manitowoc Dodge Marathon Price-Taylor\* Door Dunn-Pepin\* Rusk\* Eau Claire Shawano\* Vernon\* Fond du Lac\* Wood\* Iowa La Crosse\*

"Hitch your society to a star."

# WHY WE SHOULD HAVE A WAR AGAINST CANCER.

It is a fact that cancer kills about 75,000 people in the United States every year. Any disease which causes such a high annual toll should command the careful attention of the Government, the medical profession, and the people. The need for this careful attention is all the more imperative if both the morbidity and mortality can be very largely reduced by co-operation on the part of these three forces, i. e., the Government, its people, and their physicians.

The reduction that has been caused in tuberculosis is now a matter of history. There can be no doubt that similar well-directed and persistent activity would cause a similar effect in cancer.

The key to the reduction of cancer mortality lies precisely in this: That cancer always begins as a purely local disease involving a strictly limited area. Second, that this limited area is accessible in about four-fifths of all cases: and third, and most important, a commencing cancer practically always indicates its presence when it is still in its early, locally limited, and permanently curable stage. In other words, the enemy that we have to fight is not the cancer, but the delay. Nearly 60,000 of our people die every year, not because they have cancer, but because they have waited till the cancer became incurable.

The causes for delay are, first, that the people know little or nothing about cancer. The layman or laywoman does not know that certain evident

signs and symptoms mean that cancer is insidiously creeping on them and will be fatal unless recognized and checked in time. So that a large proportion of our 60,000 unnecessary cancer deaths occur because the people do not know. It a woman has a right to kill another human being to save her own life when attacked, how much more has she the right to know that a fatal disease has begun its attack on her? A woman who loses her life at forty simply because she never knew that irregular vaginal bleedings indicated the presence of a cancer while it was in its early curable stage certainly has not had her fair chance at the hands of civilization. If our people are dying because they do not know, we, the doctors, must teach them. We must teach women that a lump in the breast, no matter how small or how painless, may be the starting point of a serious condition and must at once be investigated by a competent physician. We must teach women that irregular vaginal bleeding, the onset of a discharge, etc., may be early warning symptoms of cancer of the uterus. We must teach all people that a mole or a wart which begins to grow, bleed, or ulcerate, is a danger sign that must be heeded at once. There are similar early signs in other portions of the body that may forewarn people, and of which they should have accurate knowledge.

There is also a great field in the conditions marked by chronic irritation and the so-called precancer lesions. Recent statistics show that in about 40% of cases the cancer, the malignant disease, was preceded by long-continued simple diseases or by some form of chronic irritation. In other words, a large proportion of cancerous people need not have had the disease at all if they had been forewarned and had their precancerous condition cured.

The second great problem lies with us as medical men. Are we as active in the treatment of precancerous diseases as we should be, or do we only too often put our patients off with some placebo and advise them not to worry? Do we always insist on a thorough examination when a patient comes to us with symptoms that may mean cancer? When an early cancer is present, do we always lay proper emphasis on the necessity for proper treatment at once? Do we not too often advise the one course which can lead to disaster and tell our patients to wait and see what develops, i. e., wait till the cancer becomes inoperable? Unfortunately at the present time these questions must be an-

swered to our disadvantage. A recent extensive investigation has shown that on an average the family physician has had his cases of cancer under observation for about a year before they come to a real attempt to cure the disease. Our attitude to cancer needs to undergo a radical change. The average of one year's observation must be cut down to a few weeks, or, best, to a few days. Immediate attention to the precancerous condition, counsel in the doubtful cases, and immediate action in the positive cases, is the only proper service we can give our patients. To do this, we need a campaign amongst ourselves, too. A new and more efficient spirit must be created which will result in constant watchfulness to keep our patients from swelling the thousands of untimely and unnecessary deaths from cancer.—(From the Commission on Cancer of the Medical Society of the State of Pennsylvania.)

#### WAKING UP TO THE CANCER SITUATION

No matter what opinions you may obtain as to the etiology and incidence of cancer, two facts are patent, the medical profession is largely unaware of its responsibilities and this lethargy will persist until dispelled by public opinion, formed paradoxically by medical teachings. Medical literature in the last few years has been overfilled with contributions not alone pleading for earlier diagnosis in established malign lesions but indicating precancerous manifestations so often responsive to simple therapy.

The results of this campaign have been of incalculable value in proving that prevention and cure are possbilities within the reach of those of the afflicted who will profit by these opportunities. On the other hand, it is held that cancer is increasing and that the death rate stamps it as the most sinister of the modern scourges. Statistics have been held to prove nothing but uninteresting. Rather be it said they prove only inaccurate. Unreliable as are our health records, they show that lives are being sacrificed in enormous numbers because individuals do not receive proper attention at the proper time. In extenuation it is commonly urged that patients apply for help only when they are helpless. Frequently this is true. but even when due to ignorance the fault is not solely theirs. Too frequently relief has been sought in vain because the early manifestations

were considered so insignificant as to have been given only off-hand attention. Or, still more indefensible, it was decided "to watch" a suspected benignancy lest it develop malignancy.

An answer probably the answer, to the dilemma is already available. In the clinies where specialand competent attention has been accorded any disease, and particularly is that true of cancer, patients appear, not only in increasing numbers, but more and more in the earliest stages of the ailment. Not infrequently these individuals come in spite of family physicians rather than because of their advice. The laity in large numbers have learned the astounding fact that a premortem diagnosis is of little benefit to the individual in any disease, and that all the late consultations with all the wise men will not alter the outcome. It is no longer possible to fail to recognize the onset of a pulmonary tuberculosis or an acute intra-abdominal catastrophe without having some friend or relative suggest that early treatment might have been more satisfactory. As increasing knowledge destroys the superstitious horror of cancer, dispels the suspicion that it is a hereditary taint, in character not dissimilar to syphilis, and teaches that it is both preventable and curable, the same consequence is to be expected. Intelligent people are now beginning to ask for necropsies. As dead men tell no tales, unopened bodies tell no truths.

Meanwhile, our duty is perfectly evident. We must learn more than we now know as individuals. or, better, more than is known about malignant neoplasms, and in the learning, teach. The Cancer Committee of the State Medical Society sent out last year upwards of 1800 letters to the members asking for information about the occurrence of cancer in their experiences, and received less than a score of answers. This indicates no undue entnusiasm but cannot be considered as evidence of unwillingness on the part of Wisconsin physicans to co-operate in this duty. The more active personal study we as individuals make of malignant processes the greater will be the good accomplished and the more we can rightfully expect from public co-operation, better support for our institutions, moral, material and legislative. This much overworked public is, after all, quite human and finds interest in those who have an interest in it, an interest quite beyond the stage of abstraction.

#### THE DANGER OF DELAY IN CANCER.

Thousands of lives now needlessly sacrificed to cancer could be saved if the patient would go to the surgeon as promptly as does the average person attacked by appendicitis. Nor is there any reason why the cancer patient should not seek this, the only safe treatment, with the same high degree of confidence in the outcome that is now common among those suffering from the other more fashionable disease. Unfortunately, the evidence is only too clear that a different attitude toward cancer prevails and occasions many preventable deaths. The almost superstitious dread of the disease and unwillingness to admit its existence or to seek medical advice in time are well known and difficult obstacles to progress in its control. Proof of this fatal neglect is found in the experience of a prominent surgeon who recently studied his case records in order to obtain definite information as to the delay in the average case. Of 65 recent patients, 35 were men and 30 were women. Further study of these 65 cases showed that after the first discovery of suspicious symptoms the men had waited an average of 12.2 months before consulting the doctor, and the women had waited, on the average, 11.9 months, practically a year's delay in all cases. Many other surgeons could produce very similar records. Winter, of Koenigsberg, Prussia. the pioneer in the education of the public in regard to cancer, examined the records of 1,062 operable cases and showed that 87 per cent. of these patients could and should have applied for treatment much earlier, when they would have had a far higher chance of recovery than was actually the case.

To the delay when the symptoms are manifest must be added the previous indefinite period after the beginning of the disease and before the patient realizes the trouble. This period can be shortened by education. Fortunately, the symptoms of cancer are present quite early and can usually be recognized if the patient understands their importance. In too many instances, however, the disease is not suspected until the symptoms are pronounced or until there is a tumor of considerable size. If we assume that this period averages six months, and then add the year's delay for which the patient is responsible, we find that the average patient does not seek advice until at least a year and a half after the onset of cancer. This precious time, thrown away, means, if not a fatal outcome, at least a serious instead of a minor operation.

In the present state of our knowledge of malignant disease it cannot be too frequently emphasized that the hope of curing cancer is to be found in its earlier recognition and in prompt and competent surgical treatment. The unfortunate patient who, because of ignorance or unwarranted fear or the blandishments of quacks, hesitates to seek proper advice should realize that in this delay he or she is recklessly throwing away a splendid chance of cure.

# A TREATMENT FOR INOPERABLE CANCER.

"The treatment of patients suffering from inoperable cancer is one of the most difficult problems in medicine today." With these words Dr. S. P. Beebe, Professor of Experimental Therapeutics, Cornell University, begins an article in the New York Medical Journal for May 15, in which he describes the results he has observed during the past year from the treatment of inoperable cases of both carcinoma and sarcoma with a new therapeutic agent originated by Alexander Horowitz, Ph. D., an Austrian biologist and chemist. Dr. Beebe is very particular in stating that this communication is only a preliminary report and that further experience may cause a change in his own ideas and conclusions, but the results obtained in some of the cases which he reports are of a character to warrant continued and prolonged investi-

"The therapeutic agent employed in this treatment is a complex one, and it is believed that it has not been heretofore employed in the treatment of cancer. The powder from which the poultice is made contains a considerable number of substances of plant origin. Seeds, roots, bark, and flowers taken from a number of different plants are prepared in the form of a powder, from which Doctor Horowitz made a poultice. The powder contains the following substances: Menyanthes trifoliata, Melilotus officinalis, Mentha crispa, Brassica alba, Anemone hepatica, Viola tricolor, Anthemis, Fructus colocynthidis, Lignum quassiae, Urtica dioica, Radix rhei, Hedge hyssop.

"The reasons which moved Doctor Horowitz to include these substances and exclude others form no part of the present discussion, which deals only with methods and results. Many of them are not commonly used in medicine and their pharmacological action has not been investigated in detail."

"As administered by Doctor Horowitz, the treatment consisted of the repeated application of a poultice to the affected parts and the administration internally in the form of an extract, either as a liquid or as a pill, of certain substances contained in the poultice itself. The application of the poultice was followed by an intense reddening of the skin and, if the application was prolonged in the beginning of the treatment, blistering might be produced. It had the effect of active counterirritation. However, the effect went farther than this. The malignant mass in many cases gradually became edematous, softer than before, and sections of tissue taken in and about the tumor showed that the lympatics were engorged with leucocytes, and if the skin was broken there was a profuse serous discharge. The exudate which later on was produced in considerable quantities in the treated area contained large amounts of broken down cancerous material, serum, and leucocytes. The leucocytes were mainly of the large and small mononuclear type. There was at the same time an improvement in the general condition of the patient, evidenced by the relief from pain, increase in appetite, and a marked improvement in the toxemia or cachexia accompanying the disease. Some of the patients examined by the writer before treatment was begun in the hospital, had large, open, ulcerated tumors which previously had been the seat of active infection accompanied by the disagreeable odor associated with such a condition. By this treatment, these infections were markedly influenced and the odor almost entirely disappeared."

In the further development of the technique of handling this therapeutic agent subcutaneous injections of an extract made from the powder have to a considerable extent displaced the use of the poultice, and it has the "obvious advantage of permitting a more certain dose, of bringng this therapeutic agent directly in contact with the growing border of the malignant cells, and producing in the depths of the tumor rather than on its surface an intense reaction, which appears to be unfavorable for the continued growth of the tumor. When these injections were first begun in human subjects, they were always confined to the growth itself. More recently they have been given subcutaneously in the arm, and it has been interesting to note that when so given there has been observed fairly definite reactive responses in the growth;

these reactions in the growth are evidenced by swelling, temporary increase in pain, followed a few hours later by a considerable relief from pain, and in some forms of tumor by softening of the growth and a gradual diminution in its size."

Dr. Beebe presents brief reports of sixteen cases which has been under his own personal observation, the diagnoses being as follows: rodent ulcer of forehead, multiple epitheliomas of skin, rodent ulcer of forehead, recurrent scirrhus carcinoma of breast, recurrent carcinoma of breast, cancer of base of tongue, tonsil and glands of neck, cancer of floor of mouth extending down into tissues of neck, epithelioma of skin of face, recurrent epithelioma of lip, epithelioma of tongue, recurrent colloid carcinoma of rectum, sarcoma in sear of operation wound (adrenal hypernephroma), recurrent carcinoma of breast, recurrent carcinoma of breast in male, carcinoma of bladder, epithelioma of floor of mouth.

These histories are said to be fairly representative of the cases which have been under treatment and while six out of the sixteen died and one discontinued treatment the results would still seem sufficiently remarkable when it is remembered that they were all cases classed as inoperable to begin with. Even in the cases in which death finally resulted there seems to have been marked relief of pain in some cases and a prompt disappearance of the offensive odor which is often so trying to both patient and attendants.

Dr. Beebe is extremely conservative in his report and considers that sufficient time has not elapsed to warrant any definite conclusions. But the extremely good results which appear to have followed the use of this therapeutic agent in such a large proportion of inoperable cases will cause Dr. Beebe's further reports to be awaited with great interest.

# THE CAMPAIGN AGAINST CANCER IN NEW ENGLAND.

The New England states generally show a higher death rate from cancer than any other group of states. This does not mean that New England people are more susceptible to this disease. Cancer is a disease of later adult life and it is well known that in parts of New England there are more old people proportionately to the population than in many other regions. Nevertheless, the death rates

recently published by the U. S. Census Bureau have stimulated much activity in these states in the educational campaign for the control of malignant disease.

What are the facts upon which this movement is based? According to the report of the Census Bureau, in 1913 there were 49,928 deaths from cancer in the registration area of the United States. corresponding to a death rate of 78.9 per 100,000 of the population. All the New England states have individual cancer death rates much higher than this. Connecticut's rate, which was the lowest of any of the New England states, was 85.1. Vermont's rate was the highest with 111.7, while the rates of the other states were correspondingly high, Maine having a rate of 107.5, New Hampshire 104.4, Massachusetts 101.4 and Rhode Island 93.3. When these figures are compared with those of Kentucky, with a rate of 48, they seem indeed very high. They mean that 6,817 people died in 1913 in New England from cancer. But it does not necessarily follow that cancer is more common in New England than elsewhere. The Census Burean attributes the high cancer death rates in certain districts to the relatively high age distribution of the population and the negligible amount of immigration. Translated into everyday terms this means that in New England the proportion of people over forty years of age, or at the cancer age. to those under forty, and so less liable to cancer. is greater than in other places. Yet there is no doubt that the cancer death rate in New England as well as in other parts of the country is much higher than it ought to be. Without question a large percentage of cancer deaths can be prevented by early recognition of the symptoms and prompt recourse to competent surgical advice and treatment. Cancer is not a hopeless incurable affection. as so many people wrongly believe. Those who know the facts believe that if the public can be properly educated in regard to the early signs of the disease and will act on this knowledge, the present mortality should be reduced at least half and perhaps two-thirds.

That New England is awake to this opportunity of saving lives is evident from the activity in several states. The New Hampshire State Board of Health has recently published sound advice in its Bulletin. In Maine an active committee of the State Medical Society is arranging public lectures and causing the publication of instructive articles

in the newspapers. Massachusetts has a well organized branch of the American Society for the Control of Cancer with headquarters in Boston. The Vermont State Medical Society has arranged a series of public meetings.

## THEIR CHAPTER FROM THE BIBLE.

A letter from the president of a county society reads:

"We meet at our club rooms every Friday night. Just after the adoption of the minutes, I always read a chapter of the A. M. A. Code of Ethics. When I finish the little book, I intend to start again at the first chapter. The members enjoy it and have learned to expect the reading, which they call 'their chapter from the bible.'"

How many county society presidents will agree to read a "chapter from the bible" at each meeting this coming year?

#### BETTER ROADS.

"It may be a little farther around the corners of a square deal, but the road is better."

R. S.

#### HOSPITAL SISTERS' CONFERENCE.

June 24, 25 and 26 there was held in Milwaukee a conference of Hospital Sisters which promises to be epoch-making. There were representatives of hospitals conducted by the Sisters from some nineteen states, such far-away points as New York, New Orleans, Kansas City, Grand Forks and Omaha being represented, while altogether some one hundred and fifty Sisters engaged in hospital work gathered for the meeting, besides a goodly number of doctors and others interested in the work.

The program which closes this article shows the high scientific character of the papers presented. The keynote of the conference was struck by Dr. John A. Hornsby of Chicago, editor of The Modern Hospital, in the first paper, when he said that "hospital was not a place of four walls, but rather a condition of mind." Throughout the whole conference, in the papers and the discussions, the theme was scientific efficiency and equipment. This conference, the first of its kind ever held, is sure to prove a great stimulus to the Sisters conducting hospitals throughout the United States, and we look to see the number spread until within a very

few years we expect that at different centers throughout the country these conferences will become a matter of yearly interest.

The officers elected for the ensuing year were:

Rev. Father Moulinier, Regent of Marquette University, President.

Sister Joseph, Rochester, Minnesota, First Vice President.

Mother Richard, La Crosse, Wisconsin, Second Vice President.

Dr. Maud Williams, of Milwaukee, Secretary. Sister Louise, Milwaukee, Treasurer.

The executive board consists of the above officers

and Dr. W. E. Fairfield of Green Bay, and Miss-Lawless, of Chicago, Illinois.

It is of interest to report that in connection with this conference a six weeks' course in laboratory technique is being given at the Marquette University School of Medicine to Sisters, nurses or others capable of taking the course. The course began June 28 and is to continue until August 7.

Program of conference:

#### FIRST DAY-JUNE 24TH.

Mass and Sermon in St. Francis of Assisi Church
—Right Rev. Sebastian G. Messmer, Archbishop
of Milwaukee.

Address—Dr. John A. Hornsby, Editor of "The Modern Hospital."

"Modern Hospital Construction"—Mr. Meyers J. Sturm, Architect, Chicago, Ill.

Business Meeting. Organization, Election of Officers, and Adoption of Constitution.

"Significance of Hospital Rating"—Mr. F. E. Chapman, Superintendent City Hospital, St. Louis, Mo.

#### SECOND DAY-JUNE 25TH.

"Staff Organization"—Dr. Robert E. Castelaw, Former Superintendent of the Kansas City General Hospital.

"Hospital Equipment"—Dr. L. M. Warfield, Assistant Superintendent Milwaukee County Hospital.

Exhibit of laboratory equipment and demonstration of some tests, in the Marquette University School of Medicine laboratories. Prof. C. J. Farmer, Bio-chemistry.

Dr. W. A. Fansler, Clinical Pathology.

Dr. L. M.-Miles, Physiology.

"The Training School,"—Dr. Joseph L. Baer, Chicago.

Symposium-"Care of Patients."

"Dietetics"—Miss Ruth Minturn, B. S., Milwaukee County Hospital.

"Operating Room—Before, During, After—Operation-Anaesthesia"—Dr. H. O. Collins, Superintendent of City Hospitals, Minneapolis, Minn.

"Nurses' Treatment of Patient in Private Room and Ward"—Miss M. E. Good, Superintendent of Nurses, Milwaukee Co. Hospital.

#### THIRD DAY—JUNE 26TH.

Symposium—"Educational Function of the Hospital."

"A Training School for Internes"—Dr. L. M. Warfield, Milwaukee County Hospital.

"The General Teaching Duty of the Hospital"— Dr. L. F. Jermain, Dean Marquette University School of Medicine.

"The Hospital's Duty to Medical Science for the Furtherance of Human Health—by Research, Production of Papers, Library and Museum—Dr. John L. Yates, Milwaukee County Hospital. "The Hospital and Social Service"—Miss Gertrude M. Knowlton, R. N. in Massachusetts, Social Service Workers of the Children's Free Hospital, Milwaukee, Wis.

Closing Remarks-Charles B. Monlinier, S. J.

## DR. ROBERT WASHINGTON COTTINGTON.

#### A TRIBUTE.

My affection for Dr. Cottington as a friend, and my boyhood association with him was of such intimacy as do not becomingly permit of eulogics from me. He would not approve it, and to me there was a respect and love for him like unto that of a son for a father, a relationship too honored to discuss. His illness and demise were made known to me but recently, and upon this occasion I desire to pay this slight tribute to his memory.

Born in Waterville, Oneida County, New York. Feb. 22, 1848, Dr. Cottington ceased this life at Bloomer, Wisconsin, April 17, 1915.

His childhood and early boyhood were passed

in his native state. His education was rounded out at Ripon College, then, as now, one of the very best colleges in the Northwest. After completing his studies there he entered Rush Medical College, Chicago, and was graduated with honors in 1877. Three years later Dr. Cottington located at Bloomer, Wisconsin, and for thirty-five years was recognized as one of the foremost members of his profession. He was trained specially to do eye, ear, nose and throat work, but his ability as an internist was promptly recognized, and whether he would or not, he was forced into general practice.

From the first his work was marked with that carnestness and zeal which at once marked him as one of the best and leading physicians of the county and state, and his services were ever in demand as physician, surgeon, consultant.

He was known as a diligent and constant student with a deep scientific interest in his profession, a man of culture and refinement, an original thinker. As a citizen and a man he was of the highest type. A consistent Christian gentleman, he did not use the church as a cloak, nor was he blatant nor conspicuous in his religious professions, but quietly, unostentatiously he practiced his creed, was firm and unswerving in his beliefs and his morals, doing unto others as he would be done by, giving much to the poor and needy, but saying no word.

There was no show, no bluster, and few know his many benefactions. He took an interest in all that was best for the community, and his influence for civic betterment was one that is now being keenly felt and missed. Dr. Cottington was never a sceker of notoricty; whatever he may have been or done for the public weal, for the church, for his profession, or for the individual, was never mentioned. He sought neither credit nor praise for his good deeds, his charity nor his aid, but was content that they meet their own approbation and that he knew that they were right.

He cared not for the praise of men, but acted from conviction that he did right, that his life and his ability were a trust, and for that feeling one has in his inner consciousness that one's work is well done. He practiced medicine for the love of it; because of his intense desire to aid suffering mankind.

My love and admiration for him began as a little boy when my father took me on his knee and told me how on a cold winter night, when the roads were impassable, he had pumped a clumsy handcar to the adjoining town, roused the doctor and brought him back with him while there was still a flicker of life in my young body. That was only one of the many times he was called in my behalf while I was outgrowing the diseases of my child-hood. This was years ago, but still I feel the cool hand on my fevered brow and see the frost on his beard as he ministered to me.

As I grew older our associations became more intimate, and when I speak of his gentleness in the sickroom, of his kindliness, of his sympathy, of his constancy and his many words of advice, I know whereof I speak. I once heard a fond young mother remark, as she watched the children swarm about him: "It is worth a lifetime of work to be so beloved as Dr. Cottington is by those little children."

Having a deep insight into human nature, and knowing the hearts of men, he was not easily misled in bestowing his friendship, which made it the more valuable to those to whom he opened his mind and heart, full of humor, of kindliness and of wisdom.

He had enemies, as do all men who achieve in this world, be it fame or success, be it honor or high standing. But to these enemies he gave each his just due and would be the last to detract from them. He had not only the love of his friends, but the sincere respect of those who were not so considered. No higher tribute can be paid any man.

His presence will be missed by his friends, by the profession of which he was for so long a brilliant star, by his church, city and state. Long may his memory live, and I am sure it will by many be cherished.

"His high, broad forehead, marble fair,
Told of the power of thought within;
And strength was in his raven hair,
But when he smiled a spell was there
That more than strength or power could win."

"You rising moon that looks for us again— How oft hereafter will she wax and wane; How oft hereafter rising look for us Through this same Garden—and for one in vain."

EARL M. TARR, M. D.

Second Ave. and 18th St., New York City.

#### NEWS ITEMS AND PERSONALS

DR. CHARLES GORST, Baraboo, retired on July 1st from the Superintendency of the State Hospital for the Insane at Mendota. He has held this position for eleven years. Dr. Gorst is succeeded by Dr. Frank I. Drake, recently prison physician at Waupun, and before that time a practicing physician at Madison and Antigo.

DR. D. F. GOSIN, Green Bay, is at the Mayo Hospital, Rochester, Minn., for post-graduate work. From there he will go to Chicago and later will visit hospitals in the eastern cities. He will resume his practice at Green Bay in August.

DR. H. E. DEARHOIT, Milwaukee, has been chosen a director of the National Association for the Study and Prevention of Tuberculosis at a recent session held in Seattle, Washington.

DR. E. F. Wood, Janesville, has left for Europe to work among the sick and wounded in northern France.

Dr. E. N. Sartell, Janesville, has been declared insane by the county court of Rock County and committed to the Mendota Asylum.

Dr. Rupert Blue, surgeon general of the United States Public Health Service, has been elected president of the American Medical Association.

DR. RICHARD JUERS, who has been practicing at the Chicago West Suburban Hospital for the past eighteen months, has returned to Wausau, and will practice his profession in partnership with Dr. D. Sauerhering.

DR. P. J. CHRISTOFFERSON, Waupaca, who has been ill at the Battle Creek Sanatorium, Michigan, since the early part of March, has returned to Waupaca and will resume his practice.

DRS. G. M. FITZGERALD, E. W. BOWEN, D. F. HUDEK, J. E. BOLAND and L. BERINGER have successfully passed the examinations for admission to the Milwaukee County Hospital as internes.

Dr. U. J. Durner, Milwaukee, has been appointed house surgeon in the Middlesex Hospital of London, England.

The tag day held on June 14 for the Milwaukee Maternity Hospital netted that institution \$2,000.

A bulletin issued by the Milwaukee Health Department on July 1st shows that there is no small-pox in Milwaukee. A year ago thirty-three cases were reported.

Residents of Wisconsin will be given the Wassermann test free of charge by the State, under authority granted by Chapter 307, laws of 1915. The new law gives the Board of Control authority to make the necessary arrangements with the laboratory of the Psychiatric Institute at Mendota for giving the Wassermann test to any person confined in any state or county institution, and of making such test for any practicing physician of the state who makes application therefor in behalf of any resident of the state.

Dr. L. H. Prince has been appointed medical supervisor of the Madison public schools, succeeding Dr. A. G. Sullivan, resigned.

Dr. W. P. SMITH, Waupun, has been appointed prison physician, to succeed Dr. Frank I. Drake, who has been promoted to the head of the Mendota Asylum.

Dr. A. D. H. Thrane, Eau Claire, suffered a stroke of apoplexy on July 2nd.

Drs. F. T. Clark, Wanpun, and John M. Dodd, Ashland, have been elected president and secretary, respectively, of the State Board of Medical Examiners, at a recent session held in Milwaukee.

The committee of the Milwaukee County Board of Charitable Institutions decided at a meeting on July 1st to finance the Social Workers' Tuberculosis Sanatorium, and to take charge of the twenty-five patients at the institution until the county tuberculosis sanatorium is completed, when the inmates will be transferred to this institution, if the board of trustees of the Social Workers' Sanatorium are willing to permit this transfer. During this temporary arrangement the Social Workers will collect funds to resume their work as heretofore, and expect to conduct the institution after Oct. 1 under their own management.

The new State Tuberculosis Sanatorium at Tomahawk Lake will be opened early in July, according to former Gov. James O. Davidson, chairman of the State Board of Control. The new sanatorium is for convalescents, and will house about forty patients.

#### DEAF CHILDREN.

Anyone interested in a little deaf child can obtain free literature explaining approved methods of training deaf children from infancy to school age by writting to The Volta Bureau for the Increase and Diffusion of Knowledge Relating to the Deaf, 1601 Thirty-fifth Street, N. W., Washington, D. C. This literature relates only to the training of little deaf children; not to medical treatment nor to the deafness that comes in later life. Age of child and other details are welcomed.

#### **MARRIAGES**

Dr. Sylvester J. Driessel, Barton and Miss Lauretta L. Schmidt of Kewaskum, on June 12th.

Dr. Benjamin Harrison Holmes and Miss Esther Marian Tyrrell, both of Delavan, on June 17th.

Dr. F. A. Malone, Waterford, and Miss Marie C. Scholl, Pewaukee, on June 20th.

Dr. Thomas H. Howe, Darlington, and Miss Gladys Ennis, Milwaukee, on June 30th.

Dr. Charles C. Rowley, Winnebago, and Miss Agnes Dalv, Grand Rapids, June 30th.

#### REMOVALS

Dr. W. G. Hyde has located at Racine.

Dr. A. I. Marble, Ashland, has removed to Neenah.

Dr. W. C. Cornee, Cecil to Seymour.

Dr. M. H. Draper, Waterloo to Deerfield.

Dr. W. C. Zimmermann, Iron Ridge to Milwaukee.

Dr. W. E. Allen, Neenah to Sun Prairie.

Dr. M. A. Barndt, Milwaukee, has removed to Long Beach, Cal.

#### DEATHS

Dr. F. W. Byers, Monroe, died on June 16, 1915, aged 87 years. He was a graduate of Rush Medical College—class of 1863. Dr. Byers served as surgeon during the Civil War with an Illinois regiment. He was a well known military surgeon and one of the founders of the Wisconsin National Guard.

Dr. Lewis Sherman, Milwaukee, one of the earliest homeopathic physicans to practice in the state, died on July 3, after an illness of four months' duration, aged 71 years. Dr. Sherman was a graduate of the New York University Medical College in 1870. Immediately after graduation he came to Milwaukee.

Dr. Erasmus Newton Sartell, for the past six years located at Janesville, died at the Mendota Asylum on July 2nd, after a week's illness with pneumonia, aged 59 years. Dr. Sartell was a graduate of Rush Medical College—1893. He had formerly practiced in northern Wisconsin. He was a member of Rock County and the State Medical societies.

## **BOOK REVIEWS**

Obstetrical Nursing. A Manual for Nurses and Students and Practitioners of Medicine. By Charles Sumner Bacon, Ph. B., M. D., Professor of Obstetries, University of Illinois and the Chicago Polyelinic; Medical Director, Chicago Lying-In Hospital and Dispensary; Attending Obstetrician, University Chicago Polyelinic, Hernotin, German and Evangelical Deaconess Hospitals. 12mo, 355 pages, illustrated with 123 engravings. Cloth, \$2.00, nct. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

Throughout this book the author has treated the nurse as the obstetrie surgeon's first assistant and with this in view has presented his material with the object of adequately training her for this important position. No attempt has been made to separate normal from pathological conditions, hence no artificial divisions have been made and the pupil is thereby given a logical sequence from the normal to the abnormal. The author is in such complete sympathy with his subject that the chapter entitled "Nurse's Duties to Self" is particularly noteworthy. This subject in many text-books has been omitted to the decided disadvantage of the pupil. The book is free from highly technical terms, yet is suffi-

eiently comprehensive for its purpose. Considerable pains have been taken in producing illustrations for the book, the majority of which are original photographic engravings of the particular objects described in the text. The plates illustrating the armenentarium necessary for the various obstetrical operations are especially good. The chapter on Infant eare and feeding is adequate and practical. The needs of both medical student and physician have been kept in mind in the preparation of this work.

TEXT-BOOK FOR MID-WIVES. By John S. Fairbairn, M. D., London. Oxford University Press, American Branch, 35 W. 32nd St., New York. Price, \$3.75.

This book of 217 pages and 107 illustrations is unique for this class of literature, in that it is especially thorough and that it deals extensively with matters pertaining to ehildbirth. The many diagrams are simple and accurate. The author often diseusses the results and possible consequences of frequent and unnecessary manipulations and manoeuvres aimed at delivery by the unskilled. Anatomy, physiology, and bacteriology of the normal, as well as the puerperal woman are completely presented. The author has been wise in omitting special names of originators of instruments and manoeuvres, thereby insuring simplicity in dealing with his subject. The style of the writing is especially readable. Physiology, breast, and artificial feeding of infants are well covered both for the normal and abnormal. Throughout this book the author has presented this material in such a way as to make the pupil reason out things for herself and not merely to learn by rote. The book could be used to good advantage as a supplementary text for nurses in general training.

Practical Medicine Series. Vol. 1, 1915, General Medicine, edited by Frank Billings, M. S., M. D., and J. H. Salisbury, A. M., M. D., Chicago. 384 pages. Price, \$1.50.

Vol. 2, General Surgery, edited by John B. Murphy, A. M., M. D., LL. D., F. A. C. S., Chicago. 573 pages. Price, \$2.00. The Year Book Publishers, 327 S. La Salle Street.

These volumes of a handy size and attractively arranged for the student and busy practitioner, are replete with suggestions of the best practice of the day. The material of the volumes consists almost entirely of abstracts of important recent articles, in each case giving the reference to the original article. The ground is covered with great thoroughness, so that these books present in condensed form what has been done during the year that is really good.

By means of this excellent series of books it is possible for the general practitioner to keep in touch with medical progress in all its directions, an undertaking which the growth of medical literature has rendered an impossibility without such an aid. The judicious editorship of the entire series and of the individual volumes eliminates most of the superficial and unsound in current medical literature and presents the articles of real value in a form full enough for satisfactory use.

# THE STATE MEDICAL SOCIETY OF WISCONSIN

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TERM EXPIRES 1919

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6th Dist., H. W. Abraham - Appleton TERM EXPIRES 1920

9th Dist., T. H. Hay - Stevens Point 10th Dist., R. U. Cairns - River Falls TERM EXPIRES 1916 11th Dist., J. M. Dodd - 12th Dist., H. E. Dearholt - - Ashland - Milwaukee

3rd Dist., F. T. Nye - - - Beloit 4th Dist., W. Cumingham - Platteville Beloit

7th Dist., Edward Evans - La Crosse 8th Dist., T. J. Redelings - Marinette 8th Dist., T. J. Redelings Delegates to American Medical Association

J. M. DODD, Ashland

A. H. LEVINGS, Milwaukee

J. F. PEMBER, Janesville Alternates

EDWARD EVANS, La Crosse

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# NEXT ANNUAL SESSION, MILWAUKEE, OCTOBER 6-8, 1915.

The Wisconsin Medical Journal, Official Publication

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WinnebagoBurton Clark, Oshkosh	H. W. Morgonroth Oabboah
Wood	W G Merrill Grand Ranids
waters, Nekoosa	Other sales

## SOCIETY PROCEEDINGS

### BARRON-POLK-WASHBURN-SAWYER-BURNETT COUNTY

The quarterly meeting of the Barron-Polk-Washburn-Sawyer-Burnett County Medical Society was held at Cumberland on June 4th. The following members were present: Drs. Dawson and Webster of Rice Lake, Fanner and Carwell of Turtle Lake, Hering of Shell Lake, Gruide and Babcock of Cumberland, Babcock of Haugen, Lumsden of Clayton, Lemmer of Spooner, and Hopkins of Cumberland. An interesting meeting was held, which was terminated with a banquet at the Hotel Cumberland. The next meeting will be held at Barron in September,

#### CALUMET COUNTY.

Calumet County Medical Society met at Brillion on June 23, 1915. Dr. A. E. Rector, Appleton, presented a paper on "Throat Affections."

F. J. FECHTER, Secretary.

#### CHIPPEWA COUNTY

The Chippewa County Medical Society entertained the Eau Claire and Dunn County societies at a piene at Irvine Park, Chippewa Falls, on June 29th. A splendid supper was served, following the supper a session was held during which several papers were read. Dr. A. C. Nussle presided.

#### DODGE COUNTY

Dodge County Medical Society met on Friday, June 18, 1915, at Minnesota Junction. Dr. C. A. Baer, Milwaukee, and Dr. Stovall, Madison, read papers.

#### DOUGLAS COUNTY

The following resolutions were passed by the Douglas County Medical Society at our recent meeting, in regard to the question of granting a separate examining board for the opticians by the State legislature:

Whereas, The jewelers and glass fitters of the State of Wisconsin are besieging the legislature of the State to grant them a special board of examiners, composed of men who are not recognized physicians, we, the members of the Douglas County Medical Society, do hereby resolve that we oppose such legislation to the utmost of our power.

Resolved, That we condemn such legislation as vicious, inasmuch as it puts into the hands of untrained, non-medical men the power of granting licenses to persons to practice optometry, thus giving to a large body of men with a questionable training the privilege of examining the eyes for glasses.

Resolved, That we are opposed to the creating of such

a board, and that all such licenses should be granted by the State Board of Medical Examiners.

Signed:

C. D. CONKEY,

Chairman Committee.

#### EAU CLAIRE COUNTY

Eau Claire, Dunn and Chippewa County Medical Societies held a joint meeting at Irvine Park on June 28, 1915, at 5 p. m.

R. E. MITCHELL, M. D., Secretary.

#### **IOWA COUNTY**

The postponed June meeting of the Iowa County Medical Society held on Thursday, July 1, 1915, at Avoca, was perhaps the most enjoyable meeting of the year. The Society was entertained at a fishing party given by Dr. and Mrs. McCollistee of Avoca, the meeting being held at the Landing Camp on the shore of the Wisconsin River. The meeting was called to order by President McCollistee, and after a very short session, during which Dr. Tyrand of Barneveld was favorably reported upon, the Doctors adjourned. After the meeting there was a boat trips to the North Shore and other points of interest. Much fishing was done by all, and under the guidance and tutorage of Drs. McCollistee and Murray and Mr. McIntyre, many good catches were made.

Dinner and supper were served in the camp club house. The day was an ideal one, the place ideal for an outing, and our host and hostess left nothing undone that would go to make up a good time. Those present were: Drs. Murray of Avoca, Gobar of Muscoda, J. R. Hughes of Dodgeville, H. D. Ludden and A. D. Brown of Mineral Point, Treutszch and McGovern of Highland.

J. R. Hughes, M. D., Secretary.

#### RACINE COUNTY

The annual meeting and outing of the Racine County Medical Society was held on June 30th, at Roy Moore's Lakeside Hotel at Brown's Lake. About forty were present. A paper on "Addiction to Drugs." was read by Dr. Powers of Wauwatosa.

#### ROCK AND WALWORTH COUNTIES.

The annual banquet and pienic of Rock and Walworth County Medical Societies was held at Lake Lawn, Delavan Lake, Wis., on June 24. Dr. Arthur M. Corwin of Chicago was the speaker of the evening, his subject being "As a Man Thinketh, So Is He." At 6:30 dinner was served at the hotel. Dr. S. B. Buckmaster was toastmaster.

#### MILWAUKEE OBSTETRICAL SOCIETY.

Forty Milwaukee County physicians organized the Obstetrical Society of Milwaukee County, at a meeting held on June 26th. Dr. E. J. Purtell was elected president; vice president, Dr. Walter G. Darling; secretary, Dr. H. McCabe; treasurer, Dr. F. E. Brown. The annual meeting will be held in January.

## **BOOK REVIEWS**

SCOPOLAMINE-MORPHINE ANESTHESIA. By Bertha Van Hoosen, M. D.

This small book of 216 pages embodies the experiences of Dr. Van Hoosen with the so-called "Twilight Sleep" anesthesia in obstetrics and gynecological surgery. Unlike most scientific texts there seems to have been a particular effort made in the compilation for an especial appeal to the esthetic. The frontispiece is that of an infant of the first "Twilight Sleep" born at the Martha Thompson Hospital. The type is large and clear and the ink used for the printing and illustrations is sepia brown to match the shade of the cover. Of the 216 pages of the book 97 or 40% of this material is devoted to a psychological study of a normal woman not in labor while under the influence of scopolamine and morphine such as is usually given to secure obstetrical anesthesia. Because of the fact that the subject under observation was possessed of an unusual sense of humor, not a little entertainment is furnished in the perusal of this chapter. The author has sincerely endeavored to accurately portray the progress of scopolamine and morphine anesthesia in surgical obstetric cases and, to those interested in this, not a little of value may be found.

For the busy general practitioner, who desires to keep moving with the current of progress this series will prove most helpful.

A Text-book of The Practice of Medicine. For Students and Practitioners. By Hobart Amory Hare, B. Sc., M. D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College, Philadelphia; Physician to the Jefferson Medical College Ilospital; one time Clinical Professor of Diseases of Children in the University of Pennsylvania. Third edition, revised and enlarged. Imperial octavo, 969 pages, with 142 engravings and 16 plates in colors and monochrome. Cloth, \$6.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

It is becoming more and more difficult to condense into a single volume the essentials of Practice of Medicine. However well one may fulfill such a truly prodigious task there will always be criticisms here and there by those who are interested in certain diseases and find in the author's book only a few lines about their pet hobbies. This is apt to create a hypercritical attitude of mind towards the whole book which manifestly is unfair to the author.

Single text books on medicine we suppose we must have for students. We do not see that they are at all necessary for the practitioner. One cannot find out all one wants to know about some disease in a brief section such as is necessary in a text book on account of space. If it is the summaries of recent, and it may be, epoch making work, he will never find it in a text book which is old when it appears wet from the press.

Dr. Hare's third edition has all the faults which are inherent in such a text book. The author is not responsible for conditions which he cannot control. Hence the book is not to be condemned. It is an excellent book of

its kind, quite above the ordinary, as is all which emanates from the pen of Dr. Hare. Here and there we make bold to disagree with him. Especially do we feel that the recommendation of the milk and albumin diet in typhoid fever is not in line with modern clinical research. It seems to have been indubitably proved that typhoid fever cases should be fed liberally with carbohydrates.

We do not admit that in cardiac decompensation digitalis raises the arterial tension. Recent careful work seems to show that it actually may lower arterial tension by regulating the heart. We miss too the recommendation of intravenous administration of certain drugs.

Occasional typographical errors are found, as is usually the case, at least one of which might be confusing. On page 499, second line from the bottom. "atrophanthus is to be given." Undoubtedly strophanthus is meant.

No mention is made of the very interesting and rather important food poisoning with the B. botulinus, so-called Botulism. Within the past year reports have been made of rather extensive and fatal epidemics.

With our present knowledge of arthritis deformans the discussion in the book is woefully inadequate. But, as has been said, the preparation of a text book on Practice is bound to be filled with ancient ideas and to reflect little credit on the author who devotes his time to compiling the material.

This book is better than some, not as good as others. It fills no long felt want but adds to the choice of text books on this subject.

The book is well illustrated and has several beautiful colored plates.

L. M. W.

"GUIDING PRINCIPLES IN SURGICAL PRACTICE." By Frederick Emil Neef, B. S., M. L., M. D. 180 pages. Surgical Publishing Co., New York, 1914. Price, \$1.50.

In this little volume the author discourses on what we may call the philosophy of modern surgical technic, more especially so far as this relates to aseptic and antiseptic precantions before and during surgical operations, and to the after-treatment of operative cases.

He not only states what he believes to be necessary for the logical carrying out of the essential requirements of such work, but states at considerable detail and with great clearness the reasons and principles underlying the rules regarded as essential.

An idea of the scope of the work can be gained by the headings of the chapters, which are as follows:

1, General considerations. 2, Preparation of the patient for operation. 3, Sterile wash and wound dressings. 4, Sterilization of utensils and instruments for operation. 5, The surgeon's hands. 6, Wound-healing and scar formation. 7, Aseptic suture material. 8, The anesthesia. 9. The incision. 10, The course of the operation. 11, Care of the patient after operation. 12, The interpretation of post-operative fever in aseptic cases. 13, The treatment of unclean wounds.

The majority of the things set forth in this little book are well known and understood, and generally accepted by the profession, yet the author has treated them in so philosophical and thoroughly scientific a manner that the perusal of the volume affords much profit and pleasure.

H. REINEKING.

# **ABSTRACTS**

CLINICAL OBSERVATIONS ON FOCAL ILLUMINATION WITH THE NERNST-SPLIT LAMP OF GULLSTRAND. Erggelet, H., (from the eye clinic of Prof. W. Stock in the University of Jena. Klin. Mon. f. Aug., 53, p. 449), discusses in detail the superiority of this lamp over all other means for the observation of the finest opacities of the cornea, lens and vitreous, nerves of the cornea, precipitates, dust in the anterior chamber, zonula in dislocation of the lens, pupillary membrane, etc., and urgently recommends its frequent use.

C. ZIMMERMANN.

ON CHANGES OF THE OPTIC NERVES THROUGH ARTERIO-SCLEROSIS AT THE BASE OF THE SKULL. Heinrichsdorff, P., Breslau), (Klin, Mon. f. Aug., 53, p. 513), found at the autopsy of an old woman, who had died under the symptoms of hemiplegia, deformations of both optic perves at their entrance into the optic foramina, caused by the grotesque carotid arteries. The cross section of the right optic nerve had the form of a crescent, with the concavity downwards and to the medial side from the compression by the carotid. The left optic nerve was forced to the medial side, its lateral margin attenuated, and had the shape of an isosceles triangle.

C. ZIMMERMANN.

MUCOCELE OF THE FRONTAL SINUS AND THE ETHMOIDAL LABYRINTH WITH SUDDEN INTENSE EXOPHTHALMUS. Kuhnt, H., Bonn., (Zeit. f. Aug., 33, p. 64), reports, after an excellent exposition of the clinical picture of this disease, a very interesting case. In consequence of a severe contusion of the right side of the forehead, which produced a traumatic sinusitis and fissures of the orbital roof, a mucocele of the frontal sinus developed, gradually spreading to the anterior and middle ethmoidal cells. The high pressure of the mucocele widened the fissure into which the inucous membranes of the frontal sinus bulged like a hernia. During severe physical strain it was punctured by the pointed edges of the bone, so that contents of the mucocele oozed out and detached the periosteum from the periorbita to the optic foramen and the orbital fissures. Almost immediately intense exophthalmus with inflammatory swelling of the lower frontal region, the upper lid and the contents of the orbital, followed. The lids could not be closed, so that the epithelium of the cornea suffered with subsequent infiltration and abscess of the cornea. After these conditions were ascertained by a diagnostic temporary resection of the lateral wall of the orbit according to Kroenlein, the radical operation of the frontal sinus according to Kuhnt's method was performed.

C. ZIMMERMANN.

On the Treatment of Trachoma in the Schools. Ticho, (Zeit. f. Aug., 32, p. 368), reports on his activity and the organization of the treatment in the schools of Jerusalem. About 1,200 children were daily treated by physicians and nurses. Wherever the disease is endemic, as in Jerusalem, the infection occurs in early youth, as

early as the 4th month of life, whereas not endemic trachoma affects most frequently individuals between 20 and 30 years old. About 30% of the Jewish, and 80% of the Arabic, population suffers from trachoma. The treatment consisted in the application of the usual causties. T. attributes good results to the rubbing with corrosive sublimate 1:1000 or 2000, according to Keining. If necessary, surgical procedures were resorted to. In children expression with Knapp's roller forceps was generally sufficient. Sometimes partial excisions were made. It is very essential that the cured cases remain under observation for a long time. The treatment must be supported by general hygiene in the houses and schools. Instructions on hygicne and treatment must be carried out with all energy in the schools, as trachoma at the beginning and especially in children is easily curable.

C. ZIMMERMANN.

CLINICAL OBSERVATIONS ON FOCAL ILLUMINATION WITH THE NERNST-SPLIT LAMP OF GULLSTRAND. Erggelet, H., (from the eye clinic of Prof. W. Stock in the University of Jena. Klin. Mon. f. Aug., 53, p. 449), discusses in detail the superiority of this lamp over all other means for the observation of the finest opacities of the cornea, lens and vitreous, nerves of the cornea, precipitates, dust in the anterior chamber, zonula in dislocation of the lens, pupillary membrane, etc., and urgently recommends its frequent use.

C. ZIMMERMANN.

CORRELATION OF HEREDITARY OCULAR AFFECTIONS (ECTOPIA LENTIUM CONG., ECTOPIA PUPILLAE, MYOPIA) AND SO-CALLED NOT CONGENITAL HEART TROUBLES. Strebel, J., and Steiger, O. (From the eye clinic of Prof. O. Haab and the medical clinic of Prof. H. Eiehorst in the University of Zürich. Arch. f. Aug., 78, p. 208.) Strebel describes the history of a family which showed through four generations a hereditary transmission of a specific predisposition to acquired rheumatic valvular affections through the mother, and besides, in the 3rd and 4th generations a hereditary propagation of congenital diseases of the aorta through the father, where the rheumatic and infectious elements were not conspicuous. The simultaneous occurrence of congenital, ocular affections, partly from embryologic causes, excluded any doubt of the hereditary character of the heart lesions. Then Steiger reports 35 cases of interesting local and general correlations, observed at the eye clinic.

C. ZIMMERMANN.

REFRACTION IN SCHOOL CHILDREN. Carsten, P., (Cont.) (Woch. f. Therap. & Hyg. d. Auges, 17, p. 101. Klin. Mon. f. Aug., 52, p. 316), found in 600 out of about 7,500 children of the common schools ametropia, i. e. 8%. The most frequent anomaly was astigmatism, mainly hypermetropic 2.9%, hypermetropia 2.35, myopia 1.46%. Cases of myopia of 1 D and less must principally be examined in mydriasis with the ophthalmoscope for excluding spasm of accommodation. Myopic astigmatism was relatively rare.

C. ZIMMERMANN.

#### THE WISCONSIN MEDICAL JOURNAL.

THE EFFICIENCY OF THE EYE UNDER DIFFERENT SYS-TEMS OF LIGHTING. Ferrer, C. E., (Ophthalmology, 10, p. 622). In 1911 the American Medical Association appointed a committee to study the effect of different lighting systems on the eye. Ferrer, who shared in the work of this committee, reports on the results. The best lighting system is not the one that gives the maximum acuity of vision for the momentary judgment or the highest level of efficiency for the fresh eye, but the one that gives the least loss of efficiency for a period of work, and the maximum of comfort. Ferrer sets forth the reasons why the loss of efficiency seems to be predominantly, if not entirely, muscular, the muscles giving both fixation and accommodation being subjected to a greater strain by the systems of direct and semi-indirect lighting than by the system of indirect lighting and daylight. In general three aspects of lighting have an important relation to the efficiency and the comfort of the eye, viz., the distribution of light and surface brightness in the field of vision, the intensity and quality. The best results are given by the systems that give the best distribution of light and surface brightness. A very wide range of intensity is permissible for daylight and indirect system. For the direct system no intensity can be found for which the eve does not lose a very great deal in efficiency as the result of work. Thus it seems that distribution is fundamental and the most important factor we have to deal with in our search for the conditions that give the minimum loss of efficiency and the maximum comfort of seeing.

The question whether or not white or colored light is better for the eye cannot be answered until definite tests are made of this point alone under conditions in which all other factors are rendered constant. Ferrer is inclined to ascribe the benefit of the kerosene flame, whatever there may be and largely attributed to the yellow quality of its light, to the low intrinsic brilliancy.

C. ZIMMERMANN.

DEFECTIVE VISION IN SCHOOL CHILDREN FROM AN ECO-NOMIC STANDPOINT. Wessels, L. C., (Fourth Internat. Congress of School Hygiene, Buffalo, August 29, 1913), emphasizes the importance of municipalities establishing their own eye clinic for refracting and the furnishing of glasses free to at least poor pupils. This is an economic problem rather than a charity, as it reduces the cost of education and increases the efficiency of both the pupil and teacher at the same time. The Department of Public Health and Charities has solved this problem in Philadelphia by establishing a Division of Ophthalmology under the Bureau of Health, where poor children can be refracted and furnished with glasses free. From 1908 to January 1, 1913, Wessels has examined 8.167 school children and refracted under a mydriatic 7,319 and furnished 6.310 pairs of spectacles free to poor children. Out of 7,319 cases refracted 5,211 or 72% were backward, representing a composite loss of 11.831 years, as the children did not reach the eighth grade in the required time, or a money loss of \$414,685,00. Now over 2,500 cases are refracted a year. If each one of these children is saved but one year during its entire school life the city saves over \$87,000 annually not counting the child's time and its increased efficiency. So the furrishing of free glasses to school children is not a charity per se, but is a duty and an economic problem.

C. ZIMMERMANN.

ON THE TREATMENT OF TRACHOMA IN THE SCHOOLS. Ticho, (Zeit. f. Aug., 32, p. 368), reports on his activity and the organization of the treatment in the schools of Jerusalem. About 1,200 children were daily treated by physicians and nurses. Wherever the disease is endemic, as in Jerusalem, the infection occurs in early youth, as early as the 4th month of life, whereas not endemic trachoma affects most frequently individuals between 20 and 30 years old. About 30% of the Jewish, and 80% of the Arabic, population suffers from trachoma. The treatment consisted in the application of the usual caustic. T. attributes good results to the rubbing with corrosive sublimate 1:1000 or 2000, according to Keining. If necessary, surgical procedures were resorted to. In children expression with Knapp's roller forceps was generally sufficient. Sometimes partial excisions were made. It is very essential that the cured cases remain under observation for a long time. The treatment must be supported by general hygiene in the houses and schools. Instruction on hygiene and treatment must be carried out with all energy in the schools, as trachoma at the beginning and especially in children is easily C. ZIMMERMANN. curable.

Schools for Weak Sighted. Levinsohn, G., (Klin. Mon. f. Augenh., 52, p. 719). So far weak-sighted children have been sent to normal schools, where they do not get along, or to schools for the blind, where they are educated as the blind without consideration of their remaining sight. Levinsohn has repeatedly urged the foundation of schools or classes for the weak-sighted, as they exist at Strassburg and Mühlhausen which, according to the reports of Redslob and Weinberger, have proved very useful.

C. ZIMMERMANN.

Control of Eye Disease in Palestine. Feigenbaum, (Klin. Mon. f. Augenh., 52, p. 576), reports from the international health office at Jerusalem, that the summer conjunctivitis in Palestine is mainly caused by Koch-Wecks bacillus, which is also found in the conjunctival sac at times, when clinical symptoms are lacking. He agrees with Meyerhof that the inflammation from Koch-Weeks bacillus is a chronic affection with acute exacerbations. It is harmless in itself but most likely gives a predisposition to trachona. The subacute and chronic inflammations of the conjunctiva are chiefly caused by diplobacilli.

Trachoma most frequently commences in children, as young as 3 years, and is spreading in indirect proportion to lack of cleanliness and hygiene. Next to gonoblennorrhoea it is the most frequent of blindness. F. recommends the foundation of a central office at Jerusalem for measures against trachoma.

C. ZIMMERMANN.

# The Wisconsin Medical Journal

Volume XIV

MILWAUKEE, AUGUST, 1915

Number 3

# ORIGINAL ARTICLES

ETIOLOGY AND PATHOLOGY OF PUER-PERAL PELVIC INFECTIONS.\*

> BY DANIEL HOPKINSON, M. D., MILWAUKEE.

When we consider that puerperal sepsis is the cause of 43.2% of all deaths connected with child bearing at this day of enlightened surgical procedure, it would seem that a brief resume to determine methods of minimizing this factor in the mortality in the puerperal state is justifiable. The mortality of this condition is not alone to be considered in vicwing the subject, but the number of cases not resulting in a fatal issue, but characterized by a more or less permanent crippling of the pelvic organs and tissues, with the resulting chronic disability, is eonsideration sufficient to justify our attention and search for an explanation or method of prevention consistent with the present knowledge of the etiological factors and pathologic changes occurring in these forms of infection.

As the field of obstetrical surgery is open to and practiced by a majority of physicians, a thorough understanding of the conditions leading to and the changes taking place in puerperal infection is important both to the general practitioner and specialist in this field. While every physician should understand the possibility of himself or his assistants being a means of introducing organisms that might result in the production of a puerperal infection, and guard against the same, there must be some protest made against the all too common danger of allowing the public to nurse the belief that when infection does take place in an obstetrical case the obstetrician or his assistants are always responsible for this infection.

Much work has been done in determining the kind of micro-organisms found in the normal genital tract of the female, and especially to determine the presence or absence of pathogenic organisms in the secretions of this tract in the healthy puerperal state. The results of these investigations may serve to explain the manner in which infection occurs in some cases, in spite of all precautions, such as disinfection, rubber gloves, etc., which are instituted in the conducting of a case. While, however, this may serve as an explanation of the rarer cases, the now well established fact remains that infection is most frequently introduced from without, and is preventable in a properly conducted case, in most instances.

Etiology. The predisposing factors may be divided into, 1, those conditions present in the individuals during the pregnant period which render them susceptible to any form of infection as a result of lowered resistance, such as anemia, nephritis, gastro-intestinal lesions, myocarditis, etc.; 2, conditions that may arise during labor, or a short period thereafter, such as lacerations, dry, protracted labor, instrumental delivery, retention of a portion of the placenta, or decidua or blood clots, retarded involution, and severe hemorrhage; 3, predisposing factors that are to a large extent under the control of the attending physician or assistants such as neglect in cleanliness, repeated vaginal examinations, and, as a predisposing factor to the development of a severe infection, the failure to recognize the earlier symptoms of an existing infection, probably mild in nature, with disregard for or lack of treatment of the same.

Determining Causes. The determining causes of all puerperal pelvic infections are bacterial in nature; the organisms most frequently found are the various types of streptococci, gonococci, staphylococci, and bacillus coli, being named in their order of frequency. While other organisms such as the diphtheria bacillus, bacillus aerogenes capsulatus, influenza bacillus, tetanus bacillus, typhoid bacillus and others have been found to produce this condition, the part played by these organisms as an etiologic factor in the production of puerperal pelvic infections is almost of a negligible nature and is to be looked upon only as a possibility.

Auto-infection. That a puerperal infection may result from organisms resident within the tissues prior to and during the puerperal state previous to labor, such as particularly the gonococcus, is unquestioned. Also in rare instances in patients suf-

<sup>\*</sup>Read at the 68th Annual Meeting of the State Medical Society of Wisconsin, Oshkosh, Oct. 8, 1914.

fering from acute infection at the time of delivery, organisms may be carried from other organs by way of the blood to the placental site, or lacerations, thus producing auto-infection of the pelvic structures.

That a puerperal infection of streptococcus type may arise in an individual apparently in normal health previously, and as the result of organisms found in the normal secretions of the genital tract, has given rise to much dispute and investigation to determine their possible existence within the normal female genital tract without the production of pathological changes. This question as to the presence or absence of pathogenic organisms in the apparently normal vaginal secretions of the pregnant woman has been answered by the results of investigators in both the negative and affirmative. Gönner, Thoma, Bensis and others claim as the result of their investigations that the healthy vaginal discharge is sterile. On the other hand, Bumm, Fullerton, Bonney and others found pathogenic bacteria in a fairly large percentage of healthy vaginal secretions. W. J. Walton and L. S. Medalia<sup>2</sup> state that hemolytic and non-hemolytic streptococci are present in the parturient canal during pregnancy and before digital examination, hemolytic exceptionally, non-hemolytic twenty times as frequently, in the vaginal secretions of the pregnant; they also state it is now recognized by the majority of authors that the streptococcus is present in the vagina of the normal pregnant woman in ten to forty per cent., the higher percentage post-partum: that streptococcus carriers are important etiological factors, not only those carrying hemolytic but also those carrying non-hemolytic streptococci: that auto-infection plays an equal role with exogenous infection as to the frequency of sepsis, but not as to its severity.

Hugo Schottmueller<sup>3</sup> says no doubt the anaerobic streptococcus putridus, which he considers the most frequent cause of puerperal infection, often if not always originates in the vagina of normal pregnant women, but may also be introduced from without. James D. Voorhees<sup>4</sup> says aerobic and anaerobic streptococci may be present in the vagina without causing symptoms or only exciting mild infection. The finding of pathogenic bacteria in the apparently normal lochial discharge is not infrequent, but might be accounted for by their introduction during or after labor, in the absence of the above explanation, that is, their presence in the vagina during the puerperal state and persistence without

the production of lesions. O. P. Mansfield<sup>5</sup> found that of forty afebrile and fourteen febrile parturients the lochia contained streptococci in a very large proportion in each series, but that the number of streptococci was much larger in the febrile cases. T. J. Watkins<sup>6</sup> says pathogenic bacteria are present in the lochia in a considerable percentage of apparently normal cases during the puerperium.

Zangemeister and Schmitt believe that autoinfection is due to streptococci present in the vagina, while Kroenig holds that streptococci found in the vulva are chiefly responsible.

Determination of the nature of the bacterial infection. There are two methods of determining the nature of the infecting organism, 1, blood cultures, which, when yielding positive results, will establish the nature of the organism; but blood cultures frequently give negative results. If, however, as Schottmüller says, the anaerobic streptococcus putridus is such a frequent cause of puerperal infection, entering the circulation and producing not only a sapremia but a genuine infection of the blood, failure to make anaerobic cultures might account for the frequent negative results.

2. Cultures from the uterine and vaginal secretions. The bacteriological examination of the uterine and vaginal secretions, according to Watkins and many others, is of small value, as the results are very often uncertain and misleading. finding of pathogenic organisms in the lochia does not necessarily mean that these organisms are the causative factors of the existing infection. It is important when a streptococcus is isolated from the genital secretions or lochia to determine whether this particular organism is pathogenic or saprophytic, especially if vaccincs or antisera are to be used therapeutically; such a determination would not be necessary with an organism isolated from the blood. Unfortunately the methods suggested for determining the pathogenicity of streptococci possess disadvantages which in a given case may not be readily overcome. The value of the division by Von Lingelshein of streptococci into longus and brevis has been disproved by the work of Marmorek and others; these characteristics often depending on the nature of the culture media and the age of the same. Hiss' classification, which is based on the power of different types of streptococci to ferment various carbohydrates, has been put in question by the work of Gordon. Animal inoculations have shown that streptococci isolated from severe human infections have at times very little pathogenicity in laboratory animals. Agglutination tests, however, may serve to confirm the interrelation of various forms of streptococci and may be used as a method of differentiation.

Pathology. Infection most frequently takes place during delivery but may occur before or after labor. The severity of infection depends upon the type and virulence of the invading organism on the one hand and the resistance of the individual on the other. While primarily a local inflammatory lesion may mark the onset, the invasion by the organisms most frequently assumes a general character, and we are dealing essentially with a systemic infection, characterized by a diversity of lesions with pathologic changes presented in almost all the organs of the body; gross lesions being most especially marked in the pelvic and peritoneal cavities. The atria of invasion are the vulva, vagina, cervix, uterine endometrium, and fallopian tubes. Infection in the vagina and vulva usually takes place at the seat of lacerations or abrasions resulting in ulcerative or suppurative inflammatory processes which most frequently remain local; extension, however, may sometimes take place through the lymphatics involving the superficial inguinal glands, and from these, by their relation with the deep inguinal glands, further extension to the iliac and sacral glands, and eventually communication with the peritoneal cavity resulting in peritonitis; so that a virulent organism entering the region of the labia or the lower end of the vaginal wall may give rise by lymphatic extension to a peritonitis. This course, however, is unusual, the infection most frequently remaining local. The infections involving the surrounding pelvic structures by extension most frequently enter through the endometrium either through lacerations of the cervix or at the placental site, resulting locally in the production of the various forms of inflammatory processes found within mucous membranes, with the added tendency to extension and invasion which the condition of the organ at this time renders more favorable. Extension of the infection may take place by continuity of tissue, that is along the fallopian tubes to the pelvic peritoneum, this manner of extension most frequently occurring when the infecting organism is the gonococcus.

2. By invasion of the wall, involvement of the lymphatics, and, through these, invasion of the contiguous pelvic structures; streptococcus infections usually follow this manner of extension resulting in the production of suppurative metritis.

either diffuse in nature, or localized abscess formations; lymphangitis and lympho-thrombosis, the lymphatic vessels becoming thickened, prominent and filled with a purulent fluid; pelvic cellulitis, which in a very short time may become suppurative in type. In the severer forms of infection involvment of the general peritoneal cavity takes place with no attempt at localization; in the less severe or milder forms the affected structures may be limited to the pelvic cavity, this cavity being walled off from the general abdominal cavity by fibrinous adhesions between the intestinal loops and the genital organs, abscess formations taking place in the pelvic cellular tissues and ovaries with extension into the fallopian tubes from without. These abscesses may rupture into the bladder, vagina or rectum, or opening above Poupart's ligament, or through Petit's triangle, evacuation may take place through the abdominal wall. Extension may also take place along the round ligament and through the inguinal canal, producing suppurative adenitis of the inguinal glands.

3. Where the seat of infection is at the placental site thrombosis of the uterine sinuses and veins often takes place, with extension of these thrombi into the vessels of the broad ligaments and the femoral veins, with frequently resulting obstruction of the circulation of the lower extremities, phlegmasia alba dolens. Portions of these thrombi may become detached with liberation of emboli into the general blood stream or a gradual disintegration may take place with the resulting pyemia, giving rise to secondary foci in lungs, heart, kidneys and other organs.

From this it will be seen that extension by way of lymphatics most frequently results in the production of the greatest local changes in addition to the general distribution of the infection. While extension by way of the blood vessels may produce but little change in the surrounding structures, the metastatic dangers are great, lesions the result of emboli lodging in distant organs present the grave pathology of this manner of extension. In the severest forms of infection death may take place before the establishment of much local or surrounding change, careful observation may demonstrate an existing phlebitis or lymphatic thrombosis. The heart, liver, kidneys and spleen will present degenerative changes as in other forms of septicemia.

Terminations. While complete resolution and restitution may be possible in some of the milder cases, this manner of termination is rare. The re-

sults locally of the destructive action of the infection are usually later recognized by a crippling of the pelvic organs varying in severity, location and persistence. In the uterus we have chronic endometritis and metritis with subinvolution and displacement, the latter as the result both of conditions within the uterus and more or less fixation from surrounding adhesions. In the tube chronic salpingitis occurs, varying in type, serous, interstitial, or suppurative. The ovaries present chronic inflammatory changes and are often the seat of persisting chronic suppurative processes, sometimes with almost entire destruction of the ovarian tissue. The exudate within the loose cellular tissue may become absorbed, encysted, or persist as chronic inflammatory foci, usually suppurative in type, with periodic acute exacerbations.

Conclusions. In conclusion, while I have cited the results of investigators showing the presence of pathogenic organisms in the normal vaginal secretions, I believe that these organisms should be considered only as a possible and not a probable source of infection, and the importance of careful aseptic surgical technique should be further emphasized by the knowledge of their possible existence, which gives us a double responsibility, that is, the early recognition of an expected and apparently unaccountable development of a purperal infection, and, secondly, the avoidance of all possible external sources of infection.

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# PUERPERAL INFECTION.\* BY WALTER G. DARLING, M. D., MILWAUKEE.

According to the statistics published by McGlinn, the total number of deaths due to the pnerperal state in the registration area in the United States during the year 1912, was 9,035. The table showed that more women died of puerperal sepsis than

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from any other cause connected with child bearing. There are no statistics on the morbidity of the disease.

#### SYMPTOMS.

The chill of puerperal sepsis usually occurs at the end of seventy-two hours following labor; however, it may in some cases be earlier, or be delayed until the fourth, fifth, or even the sixth day of the puerperium. The severity of the initial chill is unreliable from the standpoint of the prognosis. Nevertheless, the rapidity with which the chills recur indicates to some degree the virulence and the individual reaction to the invading organism. Following the chill the temperature rises above 101°, with the pulse accelerated to the rate of from 100 to 140 beats per minute. The patient complains of headache, and in some instances is nause-Abdominal pain is usually present to a greater or less degree. The uterus is tender and subinvoluted, and has a doughy or putty-like feel to the touch. The entire body, but especially the forehead and hands, is bathed in a clammy perspiration. During the chill the color of the face is of ashen grav, changing to a livid red at the height of the fever. Later in the disease the color is more of a bronze or of an icteric hue, due to the hemolytic action of the absorbed toxins. The lochia at first may not be noticeably changed, but within a few hours becomes markedly altered. The amount usually diminishes and becomes serous or flesh colored; later, sero-puruleut. It has been demonstrated that in the thick, foul lochias, the saprophytic organisms predominate: while in the watery, pungentodored lochias, the hemolytic streptocoecus is more frequently found. Insomnia is a frequent and distressing symptom. Cases in which the invasion of the blood has been early with the formation of multiple foci of pus accumulation, may exhibit but a single chill with the temperature rising no higher than 103°, and terminate in death within fortyeight hours after the onset.

Following the invasion of the broad ligaments, the peritoneum may be involved with the characteristic symptoms of abdominal distension, acute, constant pain, rigidity of the recti muscles, and tympanites. The infective process may then extend until the entire peritoneum is involved, producing symptoms of shock, with shallow, rapid respirations, small, rapid, irregular pulsa, and the ashen pallor of the facies Hippocratis. Recovery is the exception in these instances.

Pyemia presents a rather definite clinical picture.

The initial chill rarely occurs before five or six days, and the temperature does not remain so constantly elevated, but instead the curve is that of a hectic fever; the chills, rise in temperature, and sharp remission, recurring in succession. Focal symptoms develop referable to the various organs in which the infected thrombi find lodgment. Such may be in the lungs, brain, kidneys, liver, spleen and even in the joints and muscular system.

When the invasion by the bacteria and their toxins is so great as to produce early a greatly elevated temperature, with a rapid, thready, intermittent pulse, the patient becomes quickly prostrated. This form of puerperal infection is spoken of as fulminating septicemia, or by the French as sepsis foudroyant.

Phlegmasia alba dolens, or the extension of the infective process into the veins of the leg, with resulting thrombosis, usually does not appear until the second or third week of the puerperium. It is characterized by a chill, elevated temperature, pain, swelling and tenderness along the course of the femoral vessels. As in other infective processes, the degree of leukocytosis is somewhat indicative of the systemic reaction to the invading organism. The color index varies with the hemolytic properties of the causative bacterium.

#### DIAGNOSIS.

The diagnosis of puerperal sepsis in the majority of cases presents no especial difficulty. The point to which the temperature may rise before the puerperal case is considered septic varies among obstetricians from 100° to 101.5°. However, it seems to the writer that too much attention is given to thermometer readings at the expense of other clinical findings in secking an accurate diagnosis in the instance of a temperature rise during the puerperium. Not infrequently a case is encountered which exhibits a sharp rise in temperature to a point as high perhaps as 102.5° without a chill or alteration of the lochia, and which, following the administration of a cathartic, promptly returns to and remains normal during the remaining puerperal period. Too frequently is douching instituted before an accurate diagnosis is established in such cases, with the result that patients suffering from intestinal absorption thereby are infected through efforts directed toward suspected complications in the birth canal. Still too frequently does the puerpera, with a mastitis, tonsillitis or simple perineal ulcer, receive the inflecting douche on the classical third day. On the other hand there is that type of

true puerperal sepsis in which the temperature may at no time exceed 101.5°, but does show alterations in the lochia to a greater or lesser degree. It is in this class of cases that an early diagnosis can often only be accurately made by means of bacterial examinations of the lochia. By means of plate cultures on blood agar media, the formation of a zone of liquefaction about the colonies, identifies that most dangerous organism, the hemolytic streptococcus.

Since more accurate bacteriological studies of the lochia have been made we have been brought to realize that no longer may we make such sharp distinctions between saprophytic and septicemic infection. It has been shown that the majority of cases of puerperal infection are suffering from a mixed infection of both types of organism, the clinical manifestations depending on the preponderance of one or the other. It is also not unreasonable to suppose that certain strains of the streptococcus may exist in the genital canal as pure saprophytes. And again, the staphylococcus may, under certain conditions, invade the blood stream and other living tissues. In distinguishing between saprophytic and hematogenous infections, however, approximate information may be obtained by means of the blood culture. Repeated blood examinations are frequently necessary in certain cases of septicemia before the invading bacterium is secured.

#### DIFFERENTIAL DIAGNOSIS.

Other than the more common causes for rises in temperature during the puerpcrium, such as infections of the breast, tonsils and bony sinuses of the head, may be mentioned typhoid fever and malaria. Needless to emphasize these may be differentiated by means of the Widal reaction, and by the discovery of the plasmodium in the blood smear in suspected cases of these diseases. In the event of an epidemic or following exposure to infection, the possibility of such acute infectious diseases as scarlet fever, measles, diphtheria and smallpox should be borne in mind. The lighting up of a chronic infection of the appendix is not infrequently reported as having occurred during the puerperium. Pneumonia following a prolonged anesthetic may develop without the characteristic pleural irritation and cough, the early symptoms in some cases being largely abdominal, with the pulmonary conditions latent for forty-eight or seventytwo hours after the onset, in such instances being mistaken for sepsis. A cystitis subsequent to an early catheterization frequently will produce a rise

in temperature which might easily be considered as an infection of the birth canal. In brief, when considering the possibility of puerperal sepsis, it is of vital importance to make careful search in order to exclude other foci of bacterial invasion or irritation which might be the causal agents for the symptoms exhibited. Added to this a microscopic and cultural study of the lochia must be made before definite diagnosis is pronounced.

#### PROPHYLACTIC TREATMENT.

The prophylactic treatment of puerperal sepsis should begin with pregnancy. By this is meant the early institution of a hygienic regime for the pregnant woman, tending to bring her systemic economy into the highest possible state of efficiency. Healthful blood is the best of germicides. Instruction should be given as to self examination, douching and the marital relations during the latter months of pregnancy. Full tub baths in multiparons patients are also contraindicated near the end of pregnancy. Abnormal vaginal discharges should be examined microscopically for the presence of the gonoeoccus, as much may be accomplished in the way of prophylaxis to both mother and child by the early detection and eradication of this complication before delivery. When it is considered that every pnerpera is a wounded woman, and that the danger of infection is greater than in a laparotomy, the necessity for the most rigid surgical technique in the conduct of an obstetrical case will be more forcefully impressed upon the minds of those accepting such responsibilities. From the standpoint of asepsis and adequate, prompt assistance at critical moments, the proper place for the care of obstetrical cases is in a well equipped hospital. the beginning of the eighth month, careful mensuration of the patient's pelvis should be made, as well as a vaginal examination, to obtain information as to the condition of the birth canal. In the majority of cases this need be the last vaginal examination made until the patient is discharged. During labor, abdominal and rectal examinations are usually sufficient in eases progressing normally. The dilatation of the cervix, and the progress of the head through the pelvis may be accurately determined in nearly every case by means of the anointed, gloved finger introduced into the rectum, While conducting such an evamination, the vulva should be covered with a sterile pad to prevent contamination from the printing thumb. The method is safe and time-saving, as it does not require repeated disinfection of the hands for each examination. Manual dilatation of the cervix or perineum, except in operative cases, is to be avoided unless urgently indicated. Douches during labor, except after frequent digital examination, and preparatory to operation, are contraindicated. Examination or repair of the cervix unless to control hemorrhage at the time of labor is by many obstetricians not practiced. True adherent placenta is rare. In the absence of hemorrhage, the placenta should not be disturbed before forty minutes or an hour, thereby allowing the uterine sinuses to close by thrombosis and the uterus to regain its tone. This insures to a large degree against an abnormal loss of blood and the necessity of entering the uterus with a pack or the hand in order to control hemorrhage following the third stage of labor. The practice of winding the placenta about the rectum in order to twist the membranes into a strand is, in the writer's opinion, never necessary. Delivery of the after-coming membranes is delayed because of a spasm of the internal os, which in contraction grips them tightly. And subsequent relaxation, if awaited, will release the same and allow them to slip out by the mere weight of the placenta itself. It is needless to say that instrumental delivery, except for clear and definite indications, is never to be practiced. Vaginal and perineal wounds deeper than one-half an inch should be accurately repaired immediately.

Uterine or vaginal douches during the puerperium are useless and highly dangerous. An exception is made to this rule by some in cases of foul lochias after the fifth day, for the sake of the personal hygiene of the patient.

In cases exhibiting a rise of temperature with necrosis of repaired perineal tissue, the sutures should be immediately removed and suitable treatment directed toward the resulting ulcers should be instituted. Tincture of iodine, phenol, and silver nitrate are among the antiseptics most commonly employed for this purpose. The accoucheur should assure himself that his nurse thoroughly understands the proper method of preparing and changing perineal pads in order that his most earnest efforts during the delivery be not defeated during the puerperium.

#### ACTIVE TREATMENT.

Concerning the active treatment of puerperal sepsis there is perhaps no subject in surgery upon which there is such a wide difference of opinion. This difference of opinion is demonstrated by the report of the Committee on the Treatment of Puerperal Fever of the American Medical Association.

published October 25, 1913. As stated in this report, the object of the committee was to obtain the opinions of authorities and of the profession at large, to call general attention to the importance of the subject, and to formulate a course of procedure which would be generally applicable to the treatment of sepsis with retained ovular material. Four hundred letters were written to professors and assistant professors of obstetrics and gynecology in the United States and Canada, two hundred letters to professors and assistant professors of surgery in the United States, and sixty letters to professors of obstetrics and gynecology abroad. The conclusions of this report were as follows: The majority of accoucheurs and surgeons clean out the septic uterus at once, but a not negligible minority believe it safe to trust to nature alone. From this it is fair to infer that in the majority of cases it has been found safe to invade the infected uterus with the finger and the curet. This is borne out by experience. There are, however, many cases in which the infection is of such a nature, or the resistance of the patient of so poor a quality, that the sudden introduction into the system of so large an amount of bacteria and toxins as is always made by curettage, turns the scale against the patient. She cannot stand the inoculation with autogenous vaccines. At present one-half of the authorities do not make distinction between sapremia and septicemia. Few permit antiseptic douches. Many believe it no more rational to curet the uterus than to curet the tonsil.

From this report it may be said in general that the trend of opinion is toward more conservative measures in the treatment of puerperal sepsis than have formerly been employed. This is for two reasons: First, because of comparative studies of the mortality tables under the two methods, and, secondly, because of a better understanding of the pathology of the disease. When the subject is considered in the light of our present knowledge of bacterial invasion, we are forced to realize the fruitlessness and can understand the positive harm which must result from active interference in a large class of these cases. The puerperal uterus is an organ rich in blood and lymph spaces, favoring the rapid penetration of the invading bacterium. To control such invasion, the system early begins the construction of a wall of leukocytes, tending to destroy the organisms and to check the absorption of their toxins. Hence it is obvious that any measures disturbing the endometrium interfere with this process and open new areas to invasion and absorption. There also arises the possibility of introducing new cultures of bacteria not already present. When it is definitely known that ovular remains are present within the uterine cavity, and time has been given for the formation of the leukocytic wall, there may be justification in some cases of gently removing septic detritus by means of the dull curet or gauze-covered finger. The sharp curet or ovum forceps seem to have no place in the rational treatment of this disease. If the invasion of the blood stream has been demonstrated, local treatment is consequently unavailing.

Accumulations of pus in the pelvis, unless definitely pointing or located by the exploratory aspirating needle, are not to be approached, as it has been found that in the majority of cases such are walled off and absorbed. On the other hand, blind search by dissection has too frequently resulted in disappointment to the operator and disastrous results to the patient. In support of the foregoing we may review the work of Polak in his study of two hundred cases reported in his article entitled "When to Operate in Puerperal Sepsis." In seventy-two extensive exudates, suppuration was as late as the nineteenth day. Three cases were drained extra-peritoneally, the abscesses pointing above Poupart's ligament. Four were drained by the vaginal route after location by means of the needle, and sixty-five were completely absorbed under the influence of time, rest, and baking with dry heat as employed by Gellhorn. His conclusions are that operative procedures are to be avoided and are not indicated unless definite accumulations of localized pus are demonstrated.

The treatment should be essentially that of typhoid fever. An abundance of fresh air is especially beneficial to the septic patient, the open-air treatment resulting in a reduction of the mortality by twenty per cent. Tepid sponging should be instituted for temperatures over 103°. The heart on showing signs of stress should receive stimulation. Preparations of digitalis have proven most advantageous for this purpose, as strychnine, caffeinc and similar drugs tend to increase the restlessness from which the majority of septic cases already suffer. Firm contraction of the uterus must be secured early in the treatment of the disease, thereby closing the blood and lymph channels against invasion and absorption of the rapidly multiplying bacteria and their evolved toxins. Quininc sulphate in two grain doses repeated every four hours is perhaps the most suitable drug available. By its use the nauseating effect of the ergot preparations is thereby avoided. An ice bag over the uterus is a grateful means of controlling pain in this region and tends to further secure contraction. The patient should be encouraged to take food in small amounts and at frequent intervals. This frequently presents a rather difficult problem, for anorexia is one of the earliest symptoms of the disease. However, resourcefulness on the part of the nurse in providing a varying and tempting dietary can accomplish much in the way of encouraging the patient to take food.

Egg nog, malted milk, grape and other fruit juices, lemon albumen and orangeade, broths, purees, rice, mashed or baked potatoes, custards and ices are among the easily digested foods which may be suggested. Water drinking should be encouraged to four or five full glasses daily.

The head of the bed should be elevated in order to favor drainage. And in cases of threatened peritoneal involvement, the patient should be placed in Fowler's position while receiving continual proctoelysis of Ringer's solution by the drop method. Serums, bacterines, vaccines and colloids have been found not to be reliable as vet. Ligation of the iliac veins is not practiced by the majority of obstetricians and gynecologists. It has been found advantageous in severe cases to discontinue breast feeding. Morphine and allied drugs must be used with caution in these cases because of the tendency to produce nausea and to eheck the action of the emunctories. Meningeal symptoms are best controlled by the administration of bromides per rectum and the application of an ice bag to the head. Tympanites and flatulence due to intestinal stasis should be relieved by the reetal tube and by hot turpentine stupes to the abdomen.

In summing up this subject it may be said that an accurate diagnosis of puerperal sepsis depends on a careful examination of the entire body in order to exclude other foci of infection which may be the causal agents in the fever; and, secondly, by the demonstration of pathogenic organisms in the lochia of the puerperal woman. Our greatest hope for the reduction of the mortality and morbidity from this disease lies at present more largely in the field of prophylaxis. The proper place for the conduct of an obstetrical ease is in the lying-in department of a well equipped hospital. When such is not available, the preparation of the room, bed, the selection of the nurse and conduct of the case with

the same or greater care than would be employed in the performance of a laparotomy are necessary. We must strive for greater precision in abdominal diagnosis, and should substitute rectal for vaginal examinations whenever possible. Ample time must be given each case for spontaneous delivery in the absence of imperative signs of actual danger to mother or child. Sufficient time must be allowed for the spontaneous delivery of the placenta, thereby minimizing blood loss. The adoption of a separate instrument bag and sterilizer of ample capacity to carry abundant materials for obstetrical work is desirable, this bag to be used only in attending elean eases. Many authorities recognize but one indication for entering the uterine cavity during the puerperium, and that is to control hemorrhage. Intra-uterine douches or the euret cannot remove bacteria embedded in the uterine wall, but may do nunch harm by disturbing the leukoeytic barrier already established.

The writer has endeavored in this paper to again call to your attention that the keynote of prophylaxis against puerperal sepsis is more time in the preparation for and conduct of obstetrical work in general; and that in the treatment of the disease, less active measures than have hitherto been employed are resulting in a very hopeful reduction in both mortality and morbidity in the hands of our most eminent obstetric surgeons.

# DISCUSSION OF PAPERS BY DRS. HOPKINSON AND DARLING.

DR. W. C. F. WITTE, Milwankee: After reading and hearing such very complete papers on this interesting and timely subject I find it is rather hard to offer suggestions on the ground covered by the writer, so will content myself by referring, in the main, to the eases as they present themselves to the surgeon.

The subject of pelvic infections, and especially those following childbirth, has been the subject of investigation from the earliest time.

As late as the year 1847, as stated by Semmelweis, at that time a young hospital physician in Vienna, the mortality rate in eases of confinement was nearly 40%, and he then states, "That puerperal fever was caused by the absorption of decomposed animal matter, from any source." As a result of his observations, he advised and practised the washing of the hands with chlorine water, and thereby succeeded in reducing the mortality rate during the year of 1848 to 1.27%.

This was before anything was known about septicemia, or bacterial invasion following labor, now so thoroughly understood and so clearly described by the essayist.

I am especially pleased to note that the writer has called attention and emphasized the fact, that puerperal infection can take place even when the physician and his assistants are not to blame, and while this may not be the usual condition, I have noticed during my experience with this class of cases, that the physician in attendance nearly always blames himself, and the patients and relatives always do, when as a matter of fact the infection taking place at that time may really be caused by a prior infection of a venereal character, or the result of a pathological condition present following an abortion or abnormal labor.

If this fact were more generally understood by both patients and physicians, some criticisms I have heard would be more charitable.

That there is a vast amount of infection occurring through the vaginal tract as a result of the presence, normally or abnormally, in the vaginal tract of various pathological bacteria, every operating surgeon can easily testify.

They present themselves in three classes:

1st—Acute eases, with complications such as septicemia or pyemia, which cause death in a very short time.

2nd—Acute cases which eventually recover, but may have as complications:

- (1) Local infections,
- (2) Systemie infections, as

Septieemia,

Pyemia,

Peritonitis,

Thrombo-phlebitis,

Cellulitis.

3rd—Those eases which do not die, but never regain perfect health, but are suffering from,

Endometritis,

Salpingitis,

Ovaritis,

Displacements due to adhesions or pelvie congestion.

The outcome in each ease depends on the character of the infection, that is the variety of the bacteria, their virulence, and the degree of immunity of the individual infected.

The infection takes place at two different times:

1st—Those occurring at the time of parturition.

2nd—Those occurring independently of it, usually due to,

Gonoeoeeus,

Pneumoeoeeus,

Colon Bacillus.

The plan of treatment will depend upon the type of infection and its virulence.

It will always include both local and general management,

Everything that will improve the general condition of the patient, such as good food, fresh air, sleep, and proper climination of the skin, bowels and kidneys.

The administration of drugs, tending to support the individual and overcome the rapid anemia should be instituted.

Local treatment has eaused many discussions, but the general consensus of opinion seems to be that the nterine cavity tends to free itself of bacterial invasion. and when manipulation is demanded it should be of the mildest kind.

My personal experience in the treatment of puerperal infection has been most successful by using vaccines, either autogenous or stock. I recall a virulent case of septicemia, following a case of severe labor. She was the wife of one of the members of our Society, and was referred to me five weeks after her confinement.

At that time the uterus was contracted to nearly the normal size, freely movable, though there seemed to be some thickness in the right adnexa, there was a complete tear of the perineum and rectum, which had nearly granulated over.

The general picture of the patient was typical of septicemia. A diagnosis of thrombo-phlebitis was made. Nearly every afternoon the patient had a chill and a rise in temperature. Dr. Hopkinson made blood cultures, by removing 10 e.e. from the vein in the arm, and isolated the streptococcus pyogenes, the staphlococcus aureus, and an unidentified bacillus. In adition to the general treatment, it was decided to use the mixed phylaeogens. At first, I made snb-cutaneous injections but secured very little results, and then decided to use the intravenous method. In all eighteen intravenous injections were given in doses of 1½ e.e. to 3 e.e.

Notwithstanding, the fact that the patient had a temperature often as high as 105°, and once it reached 107°, and that she had numerous emboli in the lungs causing a pulmonary abseess which later ruptured into the bronchi, causing a spasm of eonghing at which time she expelled several ounces of pus, the patient made a complete recovery, and to-day one can find no trace of her trouble.

At the present time, I have under my eare, a ease of puerperal infection which occurred last May. During the course of the disease, she developed a pelvic cellulitis on the left side to such an extent as to cause her to hold the left leg in a markedly flexed position. I opened the absects extra-peritoneally and sent some of the pus to Dr. Hopkinson, who isolated a variety of streptococcus, from which an autogenous vaccine was made, and I am using it in small doses with perfect success. I believe the autogenous vaccine is best, and should be given with great care and in small doses.

The chronic eases come for treatment as a result of a long chain of symptoms. They may have a slight temperature, pain in one or both lower quadrants, more or less severe leneorrheal discharge, the abdomen may be rigid, and walking or other movement increases the pain. Vaginal examination shows the uterus and adnexa to be ontlined with difficulty, the walls rigid, and the organs fixed in position, the examination is painful, and sometimes a distinct mass can be outlined, or occasionally the cul de sac of Douglas is bulging into the vagina.

At times there is an acute exacerbation of the symptoms. These patients complain of dysmenorrhea, headache and constipation.

The treatment during the exacerbation should be rest, hot abdominal applications, hot doneles, and proper

climination by skin, kidneys and bowels. If indicated a posterior colpotomy should be performed.

When the acute stage has passed then surgical procedures are indicated to prevent a recurrence and an extension of the pathological process. Pus tubes, ovarian abscess and appendicitis are always grave pre-disposing factors to pelvie or systemic infection in a pregnant woman.

Lacerations of the cervix, with eversion, erosion, and hyperplasia of the cervix, tend to predispose to pelvic infection to say nothing of the chain of reflex symptoms which follow the neglect in repairing a lacerated eervix and perineum, therefore, both as a prophylactic and a future conservative measure, cases of chronic pelvic infection should receive the proper surgical treatment as indicated by the peculiarities exhibited by each individual case.

Dr. G. R. Baker, Tomahawk: The one thing that I would like to talk on, is the subject of auto-infection. As physicians, I think it is better for us to assume that the infection is carried from without, and you need not take the patient into your confidence in this respect; but undoubtedly, from the authorities we find that in the great majority of cases at least, the vaginal secretions are sterile.

As to the treatment outlined, I would simply coincide with the opinions given.

The invasion of the nterns in puerperal infections is a matter of judgment in the individual case, and 1 do not think it possible to outline any set rulings in these cases.

Dr. J. P. McMahon, Milwaukee: The two papers which you have just heard are the most important disenssions on the program with the exception of the address in medicine and the address in surgery. I regret that the essayists were not permitted to read their complete papers. I want to take a few minutes of your time to emphasize the importance of prophylaxis. I submit that the scheduling of a paper on puerperal infection before this Society in this, the 1914th year of our Lord, 71 years after our own Oliver Wendell Holmes pointed out the contagiousness of puerperal fever, 67 years since Semmelweiss established its infectious nature and 38 years since Lister demonstrated the absolute necessity for surgical cleanliness, constitutes a true bill against the medical profession. The ehapter should have been closed long ago as was the chapter on infection in other clean surgical procedures. The great majority of those undertaking obstetric practice, however. have not appreciated that it is a surgical procedure and many who appreciate this fact do not make their technique square with the knowledge they possess. The profession has utterly failed to measure up to its opportunities and responsibilities in obstetrie practice. The teachers and the more enlightened members have not fulfilled their duty to instruct medical students adequately and to teach the public the dangers and the eost of improper and inefficient professional male and female midwifery, the latter brand of which is little less hazardous than the former.

As evidence of the necessity for these papers, I would

eite the facts that a conservative estimate of puerperal morbidity places it still at 15% of all deliveries and the greater part of this morbidity is due to infection: that 42% of all puerperal deaths are due to infection and that about 7% (rivaling tuberculosis) of deaths in women between the ages of 20 and 50 are due to puerperal infection, most of which is chargeable to deliveries outside of hospitals. Dr. McDill informed me, enronte from Milwaukee this morning, that Frederick L. Hoffman, statistician for the Prudential Insurance Company of America, estimates that 15,000 women die annually in the United States during pregnancy or the puerperium. The mortality in well-manned hospitals does not exceed 1/8 of 1% and the morbidity is correspondingly negligible. These facts, combined with those presented by the essayists, naturally raise the question as to what we are going to do about them. Unless something is done to improve conditions, the papers will not have served the purpose for which they were placed on the program, viz., to emphasize the necessity for and the obligation of the medical profession to prevent these unnecessary illnesses and deaths. The answers are briefly as follows: the fact that obstetric practice is surgical practice, requiring surgical technique and experience, must be indelibly written on the obstetric conscience of all who undertake to advise the expectant mother and to conduct her labor; the same people must be made to understand that the more difficult obstetric operations are major surgical procedures and that no delivery should be undertaken by the enfeebled or superannuated; that the least that those who have been in practice for some time and who continue to accept the responsibilities of this work should do is to prepare properly for it by taking post graduate courses in the larger lying-in hospitals and pledge themselves to use the knowledge thus gained and to employ the technique there in vogue with the same precision that the surgeon employs similar technique in performing a laparotomy. The ungloved hand that curries the horses (tetanus), oils the automobile, changes the casings, attends cases of erysipelas, diphtheria, scarlet fever, etc., and takes part in nature's daily calls, (colon infection) is not a proper hand with which to make unnecessary vaginal examinations, to manage labors, to make unnecessary or early forceps application or to perform version. Medical men should insist that their obstetric patients place themselves under observation as soon as they become aware that they are pregnant. A routine pelvic examination should be made at the time of the first consultation for each pregnancy to determine the presence or absence of purulent vulvitis, vaginitis, cervicitis, salpingitis, cophoritis, pelvie abscesses, appendicitis or any other infective process, all of which should receive appropriate treatment and a cure be affected at the earliest time antedating labor, thereby possessing the patient with all possible insurance against the infections from contiguous structures mentioned by Dr. Witte. In this connection I want to point out that infections thus generated are extremely rare and to commend Dr. Elliott's reasoning as being better prophylactic and better pedagogical gospel. Pregnant patients should be instructed to avoid

exposure to infectious persons, places and objects and they should be cautioned not to make autogenous vaginal examinations. Intercourse during the last two months should be interdicted. Vaginal examination during delivery should be avoided as is possible in the great majority of cases. Technique, such as delivery in the left lateral position under ether and other measures designed to prevent and to minimize laceration, should be employed in every case. Laceration of the skin is espeeially dangerous because of the presence of pathogenic bacteria on the vulva, the perineal body and the anus. Medical faculties must be made to realize that obstetrics is one of the most important subjects in the curriculum, that better facilities must be furnished and more abundant clinical material must be provided, so that future graduates shall be competent to undertake this class of medical work in the light of advancing knowledge of the subject.

Maternities with adequate ont-patient service, combined with stringent midwife acts, are the only logical and permanent means of preventing infections induced by the midwives.

When infection has taken place, and the proposed statement comes under the caption of prophylaxis, also, (prophylaxis against fatalities)—and at the same time being an answer to the question with reference to entering the uterus raised by Dr. Darling-treatment should be absolutely expectant so far as local examinations, applications and instrumentation are concerned. Place the patient in a semi-sitting comfortable position, in circulating fresh air, exposed to the sun, tranquilize her mind, limit pain, induce sleep and provide her with a maximum amount of nutritious and easily assimilable foods, control hemorrhage and administer tonic doses of ergot, b. i. d., and you will have met all indications unless readily and positively diagnosable pelvic or abdominal abscesses develop. Do not attempt to remove retained placenta or infected blood clots until the temperature has become normal and involution is well advanced.

A very limited experience with sera, vaccines, human blood serum and human milk failed to demonstrate any appreciable benefits accruing from them. Autogenous vaccines are worth while employing under the direction of a competent bacteriologist when the process has become subacute or chronic.

Dr. W. G. Darling, Milwaukee (closing): I had anticipated a rather lively discussion on the question of when we should enter the interus and when we should not, because the authorities now are divided along very sharp lines on that question, and it is the big question that faces obstetrical surgeons today, and it is a question that should be considered during this meeting before we pass it by.

I believe that the trend of opinion is that we should keep out of the uterns. When we consider that bacteria once they invade the endometrium cannot be removed with the curet, it is very logical to assume that we are going to do damage when we get in there with the curet or the finger, unless we absolutely know that ovulae remain, and the only way we know ovulae remains is by finding part of the placenta gone following delivery.

I want to make a plea for careful placental examination after delivery, to know whether or not there are remains, and not guess about it, and if there are remains it would be possible to remove them with a gauzecovered finger. Beyond that I do not believe the uterns should be entered with the curet or finger, by douches or anything else, because you will open up the leukocytic wall, and open up new tissue that has not already been attacked, and do the patient more harm than good.

DR. DANIEL HOPKINSON, Milwaukee (closing): I want to further emphasize what has been my experience along the line of examination of the lochia. It is absolutely useless as far as the case is concerned, in determining whether the existing infection is or is not due to the presence of organisms found there, unless you have a lesion that you can see, and from which you can get an organism; but when that organism is within the uterus, there are thousands of bacteria that you find in the lochia. That has been my personal experience, and I think it is the real experience of most of the men that have done this work. To find the organism in the lochial discharge is no indication that this organism, or any organism that you find there, is producing a puerperal infection.

# CRYPTOGENIC AND ALLIED INFECTIONS OF SURGICAL IMPORT.\*

BY R. H. JACKSON, M. D., F. A. C. S., MADISON.

So vast have been the strides recently made in our knowledge of infectious agents as causative factors in disease, and so rapidly is the line of demarcation between so-called surgical and medical diseases fading that it would be impossible in the short time allotted me to attempt more than a brief survey of the subject, confining myself, at the request of the Chairman of the Program Committee, largely to specific cases of special interest to the general practitioner as well as to the surgeon.

Such a survey, however, must of necessity embrace a rapid resumè of our present-day knowledge of infection in general.

Life is a continuous warfare or struggle for existence. Man, having subdued his enemies among the wild beasts, is at present, and in the future will be, concerned with the subjugation of his microscopic enemies, a conquest of vital importance to the race. On the one hand is the infecting agent, be it bacterium, protozoon, fungus, or what-not, seeking by various and devious ways

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to gain entrance into the body, that wonderful, composite laboratory with such delicate adjustments that the slightest departure from normal means disease. Between the two there is constant, eternal warfare.

Nature has built up within the confines of the body remarkable and wonderful, but often inadequate, defenses. The surgeon appreciates above all others the protection afforded him against infection in his work by an unbroken skin. If we enlarge our conception of the skin to include the epithelial linings of the alimentary, respiratory, and genito-urinary systems, including the accessory sinuses and ducts, and realize the fact that their surfaces in reality face the world as much as the skin covering, appreciating as we do the enormous number of infective agents which find entrance into the body by way of the skin, we may form a faint conception of the possibilities for infection afforded by these inner linings of the body.

Through his ages of struggle to emerge from the beast man has at last arrived, but at a measured cost:

- 1. The loss of his protective, hairy covering.
- 2. The atrophy and degeneration of his teeth, accessory sinuses, etc.
- 3. The atrophy and degeneration of the capacious cul-de-sac of the colon now known as the cecum and appendix.
- 4. The acquirement of the habit of constipation with attendant changes in the wall of the gut, of which there is altogether too much for present day needs.

In fact, I think that over one hundred parts of the body have been enumerated as being in a state of desuetude. Wherever an organ or tissue is of no further use to the bodily economy, nature seeks to get rid of it by a process of atrophy, degeneration, and replacement fibrosis.

Such a condition is pregnant with possibilities for infective agents to gain entrance into the body through the numerous, though microscopic, solutions of continuity resulting from degeneration. Having before us this concept of present-day man as an enfeebled shadow of his former stone-age self, it is manifest that his microscopic enemies, who wax fat on atrophy and degeneration, are in the hey-day of their success in securing entrance to the fortress of man's existence, his body. Undoubtedly this will be known as the age of infections to the historians of the distant future.

#### ENTRANCE INTO THE BODY.

Before the invention of the microscope by Leeuwenhoeck the world of microscopic life was of no concern to physicians; it was cryptogenic or hidden.

The physician of today is not worthy of his title who, when thinking of streptococci and staphylococci, does not practically visualize them. And yet, such is the irony of fate that these same men will often fail to take proper notice of a trauma to, or breach in the dermal fortress of the body, which, while insignificant to the unaided eye would under the microscope stand revealed as a gaping wound through which hundreds of microbes could enter. In looking for the possibly hidden source of an infection I often recall the description of the skin and features of the Brobdignagians as viewed by Gulliver in his travels.

Fortunately, in the majority of cases the leucocytes or rough-riders of the capillaries are on the scene at once and overwhelm the enemy. Unfortunately, out of every thousand such instances of breaks in the integument with the attendant entrance of an infective agent, there will be a certain number in which the leucocytes are too late, or do not arrive in sufficient numbers, or are too enfeebled by having recently battled with a different tribe to resist and throw out the invaders. who, once having entered a capillary or lymphatic, may go on a voyage of destruction; the particular form of destruction depending upon the nature of the infecting agent and the hospitality offered by the different regions of the body encountered in its sojourn, and the obstruction offered by the dams or lymph nodes and the ability of the infeeting agent to reproduce itself in the blood stream and elsewhere. With the known list of infecting agents which may gain entrance into the body through a solution of continuity in the integument, including the various muco-membranous surfaces, a list which is ever increasing, there is a practically unlimited number of pathological conditions of both surgical and medical significance which may result; conditions which we designate by various names or labels, according as our limited knowledge permits us to tag them. Thus, if the agent belongs to a pyogenic tribe and forms an abscess, the resulting havoc is designated, according to the regional anatomy of the battlefield, abscess of the brain, liver, lung, etc.; if in a bone, acute osteomyelitis; if non-pyogenic and belonging

to the species that are fond of living in the ends of the long bones, we may designate the resultant enlargement as arthritis deformans; or, if it prefers the juicy cavities of the joints, acute articular rheumatism. If by chance it prefers, or at least makes itself most manifest in the lymph nodes, we may mark it Hodgkin's Disease, tuberculous adenitis, lymphosarcoma, etc. If it is enamored of a swinging existence on the valves of the heart, endocarditis is its designation.

More and more, as we gather our knowledge of the diseases which afflict the human body, we come to realize that a far greater number of them than our predecessors dreamed of, in their ultimate analysis, frequently owe their inception in the body to a microscopic solution of continuity of the integument.

Consider the cases of malaria, yellow fever, syphilis, bubonic plague, etc., all instances of an infecting agent gaining entrance through a solution of continuity in the integument. This should give us heed to observe and notice ever in our daily work as physicians and surgeons the possible avenues of infection for all diseases.

# AVENUES OF INFECTION WITH COMMON METHODS OF PRODUCTION.

- I. The skin: any solution of continuity, in whatever way produced, has attendant possibilities of being an infective atrium.
  - 1. Direct wounds produced by cutting and tearing instruments of industry; scratches by pins, nails, tin cans, etc.; small bullet wounds, percussion caps, etc.
  - 2. Bites of animals and insects.
  - 3. Abrasions and blisters produced by chafing of new shoes; overworking of tender hands; chemical, electrical and thermal traumata.
  - 4. Irritation of hangnails, which are frequently bitten off by the owner, or trimmed with a pocket knife.
  - 5. Ingrowing nails and hairs.
  - 6. Implantation of splinters and spines of prickly fruits.
  - 7. Surgical operations with lack of asepsis.
  - 8. Leaving stitches in the integument after they begin to irritate. The closure of integumentary wounds will never be ideal until a simple, sure method of closure without stitches is adopted, because:
    - (a) It is impossible to thoroughly sterilize the skin in every instance.

- (b) Every needle puncture opens up a possible avenue for infection to enter.
- (c) The suture is always a foreign body, and often produces enough irritation to start the growth of semi-dormant organisms in the deeper layers of the skin.
- 11. The second avenue of possible infection which I shall consider is the mouth.

The mouth of every animal living in a state of nature is infinitely cleaner and more hygienic than that of man. There is probably no organ in the body which shows more decidedly the effects of atrophy and degeneration with consequent richness of soil for invading micro-organisms than the teeth of present-day man. Primitive man for countless ages utilized his teeth for serious business in the act of mastication. Largely herbivorous, he was practically chewing his food all day, but after the invention of the bow and arrow, with its obvious advantages in filling the larder, he became omnivorous, and since the discovery of fire and the art of cooking he has had a steadily diminishing use for his organs of mastication. Practically all of his present day food is in a state of semi-digestion and almost complete maceration when presented to him at meal times.

Inspection of the average mouth cannot fail to reveal to the discerning eye the trinity of atrophy, degeneration, and infection, and a veritable hothouse of microbic life, including in the aggregate practically all those organisms which give rise to many of the ills that flesh is heir to. Were the inspector able to use the powers of the microscope on the average mouth, he might well imagine he was in a tropical jungle. Great caves on every side filled with colonies of pyogenic and other bacteria, eagerly awaiting an entrance to the soft, mushy mountains of gums adjacent to them, from which ever and anon, as a piece of jagged tartar or rough food is thrust against them, gushes forth a stream of blood, revealing a gaping wound for the infecting agent to enter.

It would be most interesting to know the annual mortality and morbidity rate due to mouth infections; the cases of arthritis deformans, endocarditis, osteomyelitis, pyemia, rheumatism, etc. No doubt my medical confreres will throw up their hands in holy horror if I suggest that many cases of endocarditis are, in the last analysis, surgical in nature; inasmuch as many of them owe their origin to an infective agent entering the system

through a solution of continuity in the dermal fortress of the body, (the teeth being but appendages of the skin) and differ no whit from cases arising from an abrasion or scratch on the extremities and followed by bacteremia and malignant endocarditis. Certainly, in the future, when diseases may be classified as medical or surgical, not as to the method of cure but as to the method of prevention, many so-called medical diseases of today will be turned over for prevention to the department of surgery known as dental.

#### THE TONSILS.

It is interesting to think that as the age of atrophy and degeneration began in man's evolution an all-wise Providence foresaw that the race would be the ultimate prey of infection without some organ of defense, and so devised the original laboratory of autogenous vaccines to prevent its extermination. Undoubtedly, in the majority of instances these organs serve temporarily a useful purpose, but so fast is the pace of modern life under artificial conditions of living in poorly-ventilated and crowded rooms that these organs of protection are literally stormed by one intruder after another, until in many cases they become dismantled wrecks and a menace offering lodgment to the enemy.

My time is too short to even enumerate the various pathogenic micro-organisms which have been recovered from the tonsils. Even in cases where the infecting agent is not able to directly enter the lymphatics or blood stream through the tonsils, the colonization and growth dcep in the follicles may supply a toxin which is absorbed and produces detrimental effects on the organism.

#### ACCESSORY SINUSES.

A cross section of the sinuses of a primitive man would doubtless present a striking contrast to one of the present day, which very frequently expresses, in concise form, the story of atrophy, degeneration, and infection. Because in the past these sinuses have been largely inaccessible to proper examination they have been overlooked as a source in many cases of obscure and so-ealled cryptogenic infections.

Many eases of pneumocoeeus infection of the hip and other joints as well as perinephritic and brain abscesses, owe their origin directly to infection of the accessory sinuses, and what a vivid picture is presented by the numerous cases of arthritis, due to influenzal infection of the respiratory tract!

#### ALIMENTARY CANAL.

Autogeny, or the development of the individual from conception to birth, is an epitome of phylogeny, or the development of the race. A study of the human fetus at the seventh or eighth month shows that the intestinal canal is relatively larger at this time than in the adult, from which we may say that our ancestors had need of a greater amount of bowel capacity, which might be expected, considering that they were largely herbivorous. A flesh-eating animal, such as the polar bear, has a relatively shorter intestinal tract than a grasseating animal, such as the cow. Moreover, the small intestine, where it joins the large in the carnivora, does so by simple increase in calibre; whereas in the herbivora, such as the bovine species, there is an enormous elongated eecum. The human fetus at the seventh to eighth month also shows this large pouch, which at birth has shrunken to a cecum with the terminal part represented by the appendix. The appendix at birth is relatively larger than during the after life of the individual. It is the useless remnant or vestigial remains of a former organ, and nature is striving to get rid of it in the only way possible, by atrophy, degeneration, and replacement fibrosis. In most eases she is suecessful in obliterating it in a uniform manner, leaving a solid, fibrous cord as often seen in old people. In the exceptional case the process is irregular, causing strictures and kinks with attendant cess-pools, microscopic ulcers, and solution of continuity in the integumentary fortress or mueous lining of the appendix through which the infeeting agent enters and eauses the symptoms which we call appendicitis. While we are apt to think of the appendix as being one of the internal structures of the body, it must be remembered that the lumen is in reality facing the world as much as the skin.

Time does not permit more than a mention of the opportunities afforded by the over-supply of large bowel with diminished food content, attendant habit of constipation and intestinal stasis, for various infecting agents to gain entrance through its lining into the body, the normal resistance of which is thus lessened by the absorption of toxins. This is part of the price man is paying for getting on his hind feet and assuming the erect posture.

## THE RECTUM.

This organ is especially subject to traumata from constipated stool, the custom of using rough toilet paper causing minute abrasions and the frequent presence of hemorrhoids, fistulas, etc. We should never forget the ease with which an infecting agent, having gained access at this point, may journey to the portal circulation and liver.

#### GENITO-URINARY TRACT.

The manifold opportunities for solutions of continuity in the lining of the female genital tract, opportunities greatly enhanced by the manifestly increasing difficulty of labor in modern civilized woman as compared with her primitive forbcars, together with the increasing number of miscarriages, render it an especially favorite avenue for the infecting agent to gain entrance.

In the male, the deep urethra, the prostate, and the seminal vesicles, when chronically infected, may be the source of obscure affections in other organs.

#### ILLUSTRATIVE CASES.

The following brief reports are of a few cases selected from my records to illustrate the theme of my paper:

Case 1. Mr. R., age 35, laborer. When first seen in consultation at the hospital he presented the following picture: extremely septic in appearance; delirious; irregular temperature, running to 105° daily, with occasional chills, physical examination of body negative, except for both lower extremities which were greatly distended, brawny and boggy as far as the groins. Several small incised wounds were noted from which pus was oozing. These had been made by the attendant physician. The history was that about three weeks previously the patient had been seized with a severe pain in the calf of the left leg, accompanied by high fever and chill. The pain, tenderness and swelling soon involved the entire limb, the patient running a so-called typhoid course. The right leg soon became involved by a similar process. There was no history or evidence of any injury or abrasion of either extremity which might have been the starting point of the infection. On examining the mouth the teeth were found in very bad condition and a ragged, septic-looking socket from which a tooth had recently been extracted was noted. It was then recalled by the relatives that three days before the initial chill the patient had this tooth, which had bothered him for some time and made his mouth sore, extracted. Multiple free incisions were made in both extremities, which were literally bags of pus. The patient eventually recovered. From the pus was obtained a strain of streptococcus which simulated one of numerous forms obtained from the tooth socket.

Case 2. C. B., age 5. Brought to the hospital with a diagnosis of tuberculous meningitis. As the symptoms pointed more toward a condition of brain pressure and possibly cerebral abscess, a careful search was made for possible avenues of infection. Finally a small triangular healed scar was noted above the left eyebrow. The father stated that six weeks previously the child had received a slight cut at this point in getting through a barbed wire fence. Home remedies were applied, a physician not being called. The wound exuded a little pus for a few days, and then healed. On careful examination a point was found on the skull 21/2 inches posterior to the little scar, which, on firm pressure, caused decided evidence of tenderness and imparted to the palpating finger a peculiar sensation of roughness and grating, as though the periosteum were abraded. An incision being made at this point, an area of bone about the size of a five cent piece was revealed which presented evidence of semi-necrosis. Directly beneath this was a very large abscess.

Case 3. An almost similar case to the last was that of Mr. C., age 23, farm hand, who came to the office complaining of headache and projectile vomiting, with some malaise, although he still continued at his work. Examination revealed a small indented scar in the forehead directly above the root of the nose. Two months previously, while shooting ducks, both barrels of his gun were fired at once and the gun kicked back violently, the tip of one of the hammers making a small wound on the forehead. A little pus came out of it for a few days, followed by healing, and he paid but little attention to it. Operation revealed a very large abscess in the frontal region.

Case 4. Mr. S., age 35, minister. When seen in consultation with Dr. Sheldon the patient presented all the symptoms of a most malignant acute septicemia, and it was evident that death was imminent. Three days previously the patient had taken a long cross-country walk, wearing a pair of new shoes. On removing these he noticed that he had blistered the back of his right heel. He remarked on this to his family, but paid no further attention to it. The next day he had a slight chill. The family, not realizing that he was ill, had not summoned medical aid until the third day, during which he died. On examination it was very evi-

dent that the infective agent had gained access to the body through the abrasion of the heel caused by the chafing boot.

Case 5. Mr. B., age 55, farmer. Entered hospital to have tumor of tongue excised. This tumor he had noticed for several weeks as a pea-sized, hard, painless swelling situated in the midline two inches from the tip. Gradually at first, but rather rapidly of late, it increased in size, until, on admission, it was the size of a large bean as felt between the palpating fingers, the greater part being in the substance of the organ. The mucous membrane covering it was practically normal, aside from its elevated position. The patient, who had a cancer phobia, requested a radical extirpation, but it was thought best to incise the growth as a preliminary step. On doing so there was an escape of typical actinomycotic fluid with several sulphur granules, and also a large barley head. The patient then recalled that seven or eight weeks previously he had, during the harvest time, scooped some loose tobacco out of his coat pocket and thrown it into his mouth. This was followed by such painful pricking sensations in his tongue that he was obliged to leave the harvest field and go to his house, where his daughter extracted four barley heads from his tongue. A fifth one, breaking off in her attempt to extract it, was allowed to remain, This gave him a little discomfort for a few days, and then he forgot about it.

Case 6. Mr. S., age 19, student. When seen in consultation at the hospital the patient was in a typically septic, semi-delirious condition. Physical examination revealed an area of exquisite tenderness involving the region of the right hip joint and extending several inches into the right sacrolumbar region. The septic condition, together with the high leucocyte count. indicated pus formation. An exploratory needle was introduced into the hip joint, but with negative results. At the autopsy made by Professor Bunting on the following day a septic perforation of the acetabulum was found with extravasated pus along the lumbar region and evidences of general septico-pyemia involving the liver and various other organs. The history of this case showed that several days following an attack of sore throat the patient, while riding on a train, was taken with a sudden, severe, almost excruciating pain in the right hip, so severe that he was unable to use his limb during the remainder of the journey, and rapidly developing symptoms of sepsis

followed. Undoubtedly, the source of the infection was from the infected throat or sinus.

Case 7. Mr. O., age 45, farmer. Admitting diagnosis: ulcerating rectal polyp. For many years he had carried this polyp, which had occasionally given him trouble in attacks of painful, bloody stools. A few days before admission he began to have one of his usual attacks. The day of admission he had noted new symptoms consisting of severe abdominal pains with a slight chill. The polyp, which was in a semi-gangrenous condition, was removed by clamp and cautery. The abdominal pains persisted, because excruciating, with abdominal rigidity and distension. At autopsy, on the third day, septic thrombo-plebitis of the portal vein was found.

While I may seem to have wandered far from the track, as laid down by the program committee, I trust that my purpose in doing so will be sufficiently plain.

The term cryptogenic. from the Greek "kruptos," hidden, and "generare," to generate, signifying a secret or hidden origin, first came into use as a medical phrase to designate cases in which it was impossible to ascertain the origin of certain pathological conditions. While it is in no sense a reflection on the diagnostic acumen of our predecessors to say that it was a cloak of ignorance, I doubt not that, were they to pass judgment on our use of it, they would see no justification for presentday diagnosticians, equipped with surpassing and what would be to them wonderful methods of investigation, resorting to the use of the term. With its first cousin, idiopathic, it should be relegated to the limbo of time. Most assuredly there are still numerous pathological conditions of an infective nature which are still obscure as to the exact method by which the infective agent (itself in some cases unknown), gains access to the body. But so broad is the vista opened up in recent years by the rapidly accumulating knowledge of the avenues for agents of infection to enter the body that it behooves us to ever bear in mind the obligation to ferret out in all obscure cases of surgical infection the point of incipiency or the infection atrium. The more cases of acute osteomyelitis, pyemia, brain abscess, malignant endocarditis, etc., we trace back to an insignificant, or, to the indifferent observer, cryptic solution of continuity in the dermal fortress of the body, the quicker shall we realize that this, after all, while quite interesting and exciting as a pursuit, is, in reality, like finding out how the usual American fire started; that carelessness in attention to small things is often fraught with disaster; that success in practice, as well as in business, if often due to an infinite capacity for detail, detail meaning things which to the unsuccessful are so small as not to be seen or considered.

Of what use is it to the patient stricken with some dire cryptogenic infection of surgical import to point out to him the devious methods, as in a detective story, by which the agents gained entrance? What use does the surgeon personally make of his knowledge gleaned from case after case of major complication from minor injuries? He is forever on the alert to protect himself from disastrous consequences of neglect as seen in his patients, neglect of giving proper attention to every breach or solution of continuity in the integument. Would that the general practitioner and the public as well could feel, in the case of minor injuries, the same burden of conscientious responsibility which, like the sword of Damocles, is suspended over the head of the surgeon in his efforts to keep infection out of the wounds which he makes in the performance of his art!

#### PREVENTION.

Already prevention is the shibboleth of medicine and soon to be of surgery. After all is said and done, surgery is largely a makeshift or temporizing method. Consider what would be taken from this field if all those cases were eliminated which can at present be traced back to a minor incipience, often of a preventable nature. It does not require a very vivid imagination to foresee in the future the prevention of pus formation by vaccines and sero-therapy. In the distant future it may well be that it will be necessary to consult ancient history to ascertain who the surgeons were and how greatly they whittled away in the hey-day of their prosperity during the era of infections.

In the meantime, what can we of today do in the way of prevention? What is the great stumbling block? The fact that the great majority of patients with minor injuries of the integument will not come to physicians until an infecting agent has already entered and gained a foothold. Will they ever come before this? No. What remains? To teach all inhabitants of the state that whenever they or their children have the simplest kind of an external injury they should paint it thoroughly with tincture of iodine. Appoint an Iodine Commission, if necessary, to insure that in every household, as evening comes on, there shall be a family gathering, as of old they gathered for prayers, at which time each bruise, scratch, cut, or what-not shall be properly attended to.

In the strength of our convictions as physicians and surgeons that the iodine method is the one par excellence, not only for the prevention of infection in the wounds which we make, but also for the prevention and annihilation of infection in accidental wounds, it is our duty, as soldiers in the War of Prevention, to make it a household remedy. It would be well if this Society should make one precise, specific statement to the public cach year on some phase of prevention, a statement which should be endorsed by the health department, to reach the public through the press and Extension Department of the University. How, otherwise, will you bring to them the proper fear of mouth infection and the value of oral hygiene? And here let me say that I believe there should be an intimate relation between the dental and medical societies of the State.

In so far as we of the active profession are concerned it is incumbent upon us, not only to diligently search for and purify all infection atria in acute cases under our care, but also in our daily examinations of patients to make note of and utter a word of warning wherever we find a beginning breach of weakening in the pristine strength of the protective armor against infection, an armor which Nature has provided in an unbroken skin, perfect teeth, etc. We must never for a moment forget that, however slight the primary lesion, with its often insignificant attendant effects, the agent, once having gained a habitat, may remain more or less dormant, from time to time, however, feeding active organisms into the circulation which make themselves manifest by symptoms of acute inflammatory processes in various organs.

The public must be taught to realize that in the last analysis many cases of acute surgical conditions owe their origin to the entrance into the body of an infecting agent through an opening or gap formed by the acute irritation of physical, chemical, or thermal trauma, not only of the skin, but of the teeth as well. Only then will the public readily appreciate and accept the possibility that a chronic irritation of physical, chemical, or thermal nature is, in all probability, maintaining an open

gateway or solution of continuity for the organism to enter which produces the changes in the tissues known as cancer, and that in dealing with this, the greatest of all cryptogenic infections of surgical import, prevention or early removal is the only cure.

#### DISCUSSION.

Dr. Julius Noer, Stoughton: I belong to the field of the general practitioner, and Dr. Jackson has quoted a series of cases that I think are very interesting to all of us, and, indeed, they are very interesting and suggestive along one line, and they show us that the field of the clinician is still with us, and when properly used it is even today the field to which we must all turn to get general results.

The speaker has gone into the question of general prophylaxis and sociology, and I do not know anything that is more suggestive to us in showing what can be done by applying the means that are with us today in scientific medicine, than by pointing to the very excellent work that was done by the Japanese scientists and field surgeons in the Russo-Japanese war in practically excluding from the Japanese army infectious and contagious diseases. The death rate was practically nil in that line.

Another example is that of the work done by General Leonard Wood, when in Cuba.

A third instance is that now before us so clearly and definitely in the administration furnished us by Col. Gorgas, at Panama.

We have here three excellent examples showing what can be done if we enter this field with the proper information and the proper backing in the sociological field.

I disagree with the doctor in the particular that he decides that man has degenerated physically. I do not believe that is true. Man has become more adapted, or is gradually becoming more adapted, physically, intellectually and morally, to this new civilization and environment into which we are constantly advancing, and it only remains for us to put forth those means which we have at hand to insure man a better existence, and to make the world a better place to live in.

The horticulturist is the first man who has taken adequate advantage of the discoveries of modern science. And what are the lines along which he has worked? He does not let the propagation go on haphazard as in our ease; he has studied the laws that were developed by the Austrian men; he propagates his species by selecting buds that resist infection, and thus produces a hardy, resistant tree. I refer particularly to the southern California orange groves with which work I have become familiar. But that is not enough, he follows up the infective agents by establishing laboratories and experimental farms, which study the propagation of those germs that are inimical to the life and production of the growth, and he exercises there all those preventive measures and disinfection by the strongest possible agent, evanide. He studies the nutrition of these trees, so that he is constantly on the watch for a better and a more improved race.

HODGKIN'S DISEASE AND ALLIED AFFECTIONS.

BY J. L. YATES, M. D., MILWAUKEE AND C. II. BUNTING, M. D., MADISON.

Observations made during the past seven years have led us to a realization that the established conception of Hodgkin's Disease, i. e., a progressive enlargement of superficial and deep lymph glands, a peculiar splenomegaly, anemia, cachexia and certain death with one fairly constant histo-pathological lesion, is too narrow.

As a result of our studies a working hypothesis has been developed upon a conception that Hodgkin's Disease is a non-communicable, infectious granulomatous process due to the B. Hodgkini and protean in its elinical manifestations. During the course of a typical form of the disease, typical according to accepted teachings as indicated above, fairly constant physical and physiological phenomena develop. The progress clinically is not steady, there are alternating periods of progression and regression, three fairly well differentiated stages are recognizable, and as a result of the specific toxemia a characteristic blood picture, indicative not only of the disease but also of the stages thereof is associated with a progressive ancmia of the secondary type.

Pathologically four fairly distinct stages\* occur in the development of the latest known lesion, not all of which have been found in any one ease. If life is sufficiently prolonged no organ or tissue in the body may escape direct or indirect involvement.

\*Note—The tenability of the working hypothesis already stated is directly dependent upon the existence of these stages. It is quite illogical to presume that but one lesion occurs and this without earlier or later developmental or individual variations. In any consideration of the following crude outline of these changes it should be remembered that although the causative agent or agents in this group of affections has a remarkable affinity for adenoid tissue, primary infection may occur elsewhere and there provoke (e. g., in lung or fat) apparently the earliest reactions, reactions searcely recognizable in mature lymph glandular structures.

## Stage I. Early precharacteristic lesions.

Soon after the specific irritation there is the usual tissue response, exudation, a deposition of fibrin and an accumulation of neutrophiles with occasionally the occurrence of plasma cells in considerable number. A little later fibroblastic proliferation is noted and the first development of characteristic changes in the appearance of large endothelioid cells and the tendency to minute necroses with subsequent eosinophilic infiltration. These earliest lesions have been described as hav-

Even in the most typical cases a certain diagnosis rests upon three factors, hematological, bacteriological and histological, since other affections, e. g., hyperplastic tuberculous adenitis, may imitate the clinical picture too closely for any other differentiation if indeed it shall ultimately prove to be differentiable.

In any apparently typical case, atypical hematalogical or histological changes may develop, so we believe that until the identity of the *B. Hodgkini* is incontrovertibly established, two of the three diagnostic factors must be present in order to make a positive diagnosis. For the present it is

ing occurred clinically by Benda and Chiari and have been observed both clinically and experimentally by Bunting.

Stage II. Early characteristic lesions.

By this time, possibly a matter of two or three weeks, there is a moderately advanced diffuse fibrosis with a consequent obliteration of the normal architecture of the affected glandular tissue. The characteristic occurrences of many endothelioid cells, frequently having produced the almost pathognomonic type of giant cells now make it virtually impossible to escape a definite recognition of the process, though the edema may be considerable and neutrophiles present in profusion. The frequency and extent of necroses and the number of eosinophiles depends upon the intensity of intoxication. This is the cellular or acute type of Fischer, Andrewes and Reed, confirmed by many others.

Stage III. Late characteristic lesions.

The fibrosis has now become extensive with consequent diminution in the number of cells present, the lymphocytes being conspicuously fewer. Otherwise the cellular elements are of quite the same character. This is the characteristic lesion usually regarded as diagnostic and often the only one accepted as such. Although first described by Langhans in 1870 it was not generally recognized until the work of Fischer, of Andrewes and of Reed was published thirty years later.

Stage IV. Terminal characteristic lesions.

These changes are seidom observed because death commonly occurs before they can develop. The fibrosis is very advanced, the gland is almost entirely converted into scar tissue between the fibres of which occur a few cells, more of the endothelioid type than of the lymphocyte.

Atypical and transition changes are too numerous and complicated to discuss at this time. If the foregoing observations are correct the idea that the process is primarily a neoplasm, as upheld by Mallory, is utterly indefensible. Late sarcomatous metamorphosis as described by Karsner and others may occur. We have some bacteriological and physiological evidence that tissue apparently sarcomatous histologically is actually of an inflammatory character.

assumed that the lesser variations in these cases are the result of individual differences in tissue reponse to similar toxins since the organisms obtained from such cases are apparently of identical strains.

As the number of observations increased it became evident that there were variations also in the strains of the diphtheroid organisms obtained, and that possibly these strains not only provoked correspondingly varied tissue response, but also showed group variations in the character of this response just as does the more common variety.

The evidence we hold to substantiate these assumptions cannot even be outlined at this time. However, it must be evident that if the etiological relationship of the *B. Hodgkini* is established the other details are of comparative insignificance.

We recognize that diphtheroid organisms are ubiquitous but we ask recognition of the possibility that there may be diphtheroids and diphtheroids. The strains we have obtained exhibit a decided individuality and recent experimental evidence (Oblitzky) upholds this.

The organism is to be obtained in pure culture from virtually 100% of tissue showing the characteristic changes if it is uncontaminated and has not recently been too thoroughly X-rayed. A morphologically identical organism my be stained in situ in such tissue and apparently be the only organism present therein. It may be obtained repeatedly from the same individual (5 times from one patient, 3 times from another, twice from two others) from near and remote and from recurrent lesions. We have not as yet obtained it from other lesions. though cultures of dissimilar diphtheroids have developed from such tissue, but then there is some hematological or histological evidence of its activity if we may accept a typical Hodgkin's picture as such evidence.

Inoculations of a man and animals have reproduced the early lesions as they occur spontaneously and induced changes in the blood picture that Bunting has shown to be so characteristic. The effects of inoculation vary with the virulence of the organism and also with the period and method of inoculation, subcutaneous or intravenous, as well as the size of the dose. If these observations cannot be duplicated by the use of some other organism then it would appear that our contentions have basis in fact.

Clinically our studies would indicate the possibility of a tentative classification of these infec-

tions into four groups based upon differences in the strains of organisms obtained as well as upon consequent tissue reactions, but all possessing certain common features; alternating periods of progression and regression, three fairly distinct stages, quite constant variations in the leucocytes, progressive secondary anemia and a fatal termination.

Group I.

Typical glandular variety wherever primary; cervical, inguinal, axillary, mediastinal or abdominal.

In addition

b. Banti's disease. Primary Splenic Anemia.

Banti in 1898 had observed that this was quite possibly a splenic form of Hodgkin's disease. Pure culture of *B. Hodgkini* has been obtained in all of four cases we have had the opportunity to study.

c. Mycosis Fungoides.

Winnewarter in 1875 predicted that Hodgkin's disease and Mycosis fungoides would be found to result from the same irritant.

Pure culture obtained from glands in the one case studied with Drs. Foerster and Baer.

Histological confirmation from skin and lymph gland.

- d. Elephantiasis-like subcutaneous cellulitis.
- e. Certain hypertrophic arthritides.

Observed in one case, cultures (pure) obtained twice, at an eight-month interval. Recurrent attacks of acute arthritis noted in one subacute case without any other etiology. This lesion has been reproduced experimentally.

Group II.

Atypical glandular variety.

Simulating lymphosarcoma. Three cases have been studied, from two cultures were obtained, the third was still confined to a tonsillar tumor. These observations confirmed by Dr. Graham in his study of a case at Lakeside Hospital, Cleveland.

Group III.

Atypical glandular variety.

Simulating lymphocytic leukemia, if not identical therewith.

- b. Pseudo-leukemia (differing from leukemia only in the absence of lymphocytosis).
  - c. Chloroma (if not identical with b).

Group IV.

Atypical glandular variety. Associated with tuberculous adenitis.

These cases have been studied with as yet inconclusive results. Ewing, Adami, Fraenkel and Much

regard the *B. Hodgkini* as a modified form of the *B. tuberculosis*. Such evidence as we possess is against this view.

The results of treatment, which is fundamentally surgical, but with supplementary hygienic, roent-genologic and serological procedures, and is based upon the nature of the infection, its method of extension and the inability of the individual to combat the disease, have been particularly gratifying. We believe we can show that more than 10% of cures are obtainable in the ordinary type of the disease, especially when taken early, but even then the mortality has been accepted as 100%. Taking all cases into consideration, the percentage of cures should be still higher.

A cure is understood to be established only when there has been no evidence of the disease for five years. This will explain why a more positive statement of ultimate results cannot be made at present. There is some basis for a belief that help is to be obtained from immune sera, a compensation for the disappointment consequent upon the failure of therapeutic vaccination.

# THE PROGNOSIS IN TRAUMATIC NEU-ROSES AND PSYCHOSES.\*

BY FRANK C. STUDLEY, M. D., MILWAUKEE.

Medical literature treats the subject of the prognosis of the traumatic neuroses and psychoses with many reservations and from extremely divergent points of view. A few generalities are indulged in, apparently without statistical citations, and then the subject is dismissed. It is important to know something about prognosis, for it definitely concerns the individual as well as the corporation, in view of the fact that the trend of current opinion places the responsibility for these injuries upon employers, motor car owners, railroad and public service corporations.

The prognosis of the non-traumatic cases would not be in point even if such statistics were to be had, because certain elements which are peculiar and individual to the traumatic litigation cases are lacking, namely, the influence of suggestion, in which introspection, the lure of lucre, frequent conversations with physicians and lawyers, the acrimony of court trials, and the absurd delay in proper treatment, complicate the picture, and have

<sup>\*</sup>Read before the Milwaukee Medical Society, March 9, 1915.

a decided influence upon the course and prognosis of the traumatic case. What is needed is the prognosis of new and beginning cases of the traumatic neuroses and psychoses under present conditions—not the prognosis of old cases which come under the observation of practitioners and the hospital staff after years of chronic invalidism, for the prognosis assuredly must be different.

The organization best fitted to tabulate these statistics is certainly the public carrier, but so far as I have been informed no attempt has been made by them to follow up the post-settlement and after histories of these cases, and so the best statistics in point of numerical value are wanting.

Suggestion and malingering occupy no unimportant part of our experience in the routine examination of traumatic litigation cases. The great majority of my cases have exhibited an abnormal suggestibility, and this state of mind has increased as time went on, and the date of the approaching trial neared. It has been my experience, frequently enough, to find that whereas the first examination was unsatisfactory to the claimant's interest, the second and third examinations would be marvels of descriptive accuracy, of voluminous symptomatology, nothing missing, and with such amplification of detail as to suggest a studious and mighty effort with intent. There is reason for all this. The influence of interested relatives, the inadvertent and leading questions of physicians and lawvers, the greed for money, the introspective habit of dwelling upon, worrying over and enlarging upon their own feelings and symptoms, and the dominant motive of self interest, all have their influence in bringing about this state of mind, psychogenetic in its analysis. And yet I do not believe that except in a small percentage of these cases conscious simulation and exaggeration are made. There is no argument as to the existence of these psychoses and neuroses where litigation is not in process, where no liability exists, and where money settlement is necessarily out of the question, although I must admit that the non-litigant cases show surprisingly fewer and less serious subjective symptoms than the trial cases.

Unconscious exaggeration is itself a symptom of neurasthenic and hysterical states, and we meet with this almost as frequently in private practice as we do before courts of law. Simulation is confined mostly to the representation of a symptom rather than to an entire disease picture; but because the claimant exhibits one or two symptoms

which have the appearance of exaggeration or simulation we must not conclude that the entire disease is simulated, or that conscious exaggeration exists at all. Unconscious exaggeration is one thing, lying or malingering is another, and we must determine through wide experience and by malingering tests the proper classification of the claimant.

One important factor bearing upon the prognosis of the neuroses is the antecedent history of the patient, but for various reasons this is impossible to obtain in the traumatic litigation cases. Judging from what the litigants tell you, you would have to conclude that they were all in firstclass health prior to the trauma, and that all of their troubles appeared subsequently. I have never vet examined a traumatic litigation case who had had or who could show a neurological examination report of themselves antedating the accident; but my personal conviction, based upon repeated observations, is that the injury quite as frequently simply precipitates a latent or potential condition which has a bearing on the prognosis of equal importance with the injury.

In this connection I would state that I have examined several cases in which eye symptoms were prominent after a trauma, in which an objective examination revealed a refractive error of which the patient hitherto was unaware, for which damages were asked and which must have existed prior to the trauma.

The literal definition of trauma is that of a wound or lesion; but in the medical understanding, especially with neurologists, such trauma may be ever so slight. It may be physical or psychical and constitute a pure emotion—fright or fear.

By the traumatic neuroses we include traumatic neurasthenia, traumatic hysteria and simple hypochondriacal states, either alone or as a mixture of these various forms. The traumatic psychoses are represented by depressive states, arteriosclerotic and senile dementias, dementia due to severe organic injury to the brain, delirious states and mental dullness. The propriety of including paresis, manic-depressive insanity, dementia praecox, and certain paranoid states is without question, but for the purpose of this paper I have thought best to reject them. However I do not feel like dismissing the subject without a word as to the medico-legal relationship between latent syphilis and trauma. I have examined in the past few years three cases where the diagnosis was made of tabes in two and paresis in one, confirmed by clinical symptoms and

Wassermann findings, which exhibited no symptoms of the disease prior to the injury, but went on to a precipitate evolution of all the symptoms within a short space of time after the trauma. I see no reason to question the adequacy of trauma as a cause for this reactivation of latent syphilis any more than the etiological sufficiency of trauma in carcinoma of the breast.

It is of course no part of this paper to consider the symptomatology or pathology of the neuroses and psychoses at all.

During the past eight years I have personally examined and tabulated 39 cases of the traumatic neuroses and psychoses with particular attention to the date of injury, the age of the patient, the diagnosis, money settlement in the litigation cases, and

the result. The longest time which has elapsed between the date of injury and final report is eight years and the shortest is two years. All of the cases were first examined within one year of the date of the trauma. No case has been considered in the neuroses where the picture was complicated by the presence of any gross organic change in the brain or cord. In the traumatic psychoses the demonstrable presence or absence of organic brain changes has been disregarded, except as to diagnosis and in so far as the examination indicated the necessity of surgical interference, in which case record has been kept of the surgical procedure made, and the final result. The statistics as to final results, so far as possible exclude cases of subsequent disease or injury bearing on the result.

TABLE I-TRAUMATIC NEUROSES.

	Case	Аде	Date of Accident	Physical Trauma	Psychic Trauma	Diagnosls	Money	Result
1.	Miss A. N	17	1909	Yes	Yes	т. н.	Yes	Recovery.
2.	Mrs. R. R	29	1909	Yes	Yes	T. 11N.	Yes	P. R.
3,	Mrs. C. C. MeL	37	1909	Yes	Yes	T. IIN. Hyp.	No	P. R. with severe defects.
4.	Mrs. M. L	33	1909	Yes	Yes	T. HN.	Yes	P. R.
5.	Mrs. J. G	45	1909	Yes	Yes	T. N.	Yes	P. R.
6,	Mr. E. G	40	1910	Yes	Yes	T. N.	Yes	Recovery.
7.	Mrs. E. M	34	1910	Yes	Yes	T. 11N.	Yes	Dementia.
S.	Miss C. G	16	1910	Yes	Yes	т. нх.	No	P. R.
9.	Mr. J. R	44	1911	Yes	Yes	T. 11N.	No	P. R.
10.	Mr. G. II	48	1911	Yes	Yes	т. к.	Yes	Recovery.
11.	Mr. M. W	53	1911	Yes	Yes	T. N.	Yes	P. R.
12.	Mrs. A. Z	28	1910	Yes	Yes	т. пу. пур.	Yes	P. R.
13.	Mrs. I. L	47	1910	Yes	Yes	T. N.	Yes	P. R.
14.	Mr. V. M	27	1911	Yes	Yes	T. IIN.	Yes	No improvement; unable to work.
15.	Mr. J. K	24	1912	Yes	Yes	т. нм. Ер.	Yes	P. R.
16,	Mr. P. K	33	1912	Yes	Yes	т. 11N. Пур.	No	No improvement.
17.	Mr. F. H	23	1912	Yes	No	T. N.	No	Recovery.
18.	Mrs. J. 11	27	1913	Yes	Yes	T. N.	Yes	Recovery.
19.	Mrs. E. V	40	1913	Yes	Yes	Т. 11.	Yes	P. R.
20,	Mrs. M. M	50	1913	Yes	Yes	T. HN.	Yes	Recovery,
21.	Mrs. F. K	52	1913	Yes	Yes	T, H,-N.	Yes	No improvement,
22.	Miss J. M	9	1913	Yes	Yes	T. HN.	Yes	P. R. with severe defects.
23.	Mr. E. R	19	1913	Yes	Yes	T. N.	Yes	Recovery.
24.	Mr. C. H	57	1913	Yes	Yes	T. N.	Yes	P. R.
25,	Mrs. C. G	22	1913	Yes	Yes	T. IIN.	Yes	P. R.
26.	Mr. P. J	32	1913	Yes	Yes	T. N.	Yes	Recovery.
27.	Mrs. W. R	30	1913	No	Yes	т. н.	No	Recovery.

Average age, 34.

There were three cases of malingering not tabulated in this group, and if added to the total number would make 42 cases, with 7 per cent of malingering.

I have not included three cases of malingering in which simulation of neurasthenia was plain and eonvineing. Among the traumatic neuroses there were three cases of traumatic hysteria in whom no neurasthenic symptoms existed. The prognosis in the traumatic neuroses has been considered separately from the prognosis of the psychoses.

various grades, mental dullness and depressed states. In this group there were 10 men and 2 women.

Taking first the traumatic hystero-neurasthenias and the hypochondriacal states numbering 27 cases, full recovery has occurred in 8 cases, partial recovery in 15 cases, the eases of no improvement at

TABLE II-TRAUMATIC PYSCHOSES.

	Case	Аве	Date of Accident	Physical Trauma	Psychic	Diagnosis	Money	Result—1915
1.	Mr. F. R	25	1907	Yes	Yes	T. P. with	Yes	Decompression Op. P. R. with
2.	Mrs. Λ. J	55	1907	Yes	Yes	Epilepsy T. P. Org. Inj.	Yes	Epileptic attacks. Death. Op. indicated, refused.
3.	Mr. A. C	38	1909	No	Yes	T. P. Sev. Del.	No	Death.
4.	Mr. O. S	17	1908	Yes	Yes	Т. Р.	Yes	P. R. with severe defect.
5,	Mr. F. S	29	1909	Yes	Yes	T. P. Lac, Hem.	No	P. R. with severe defect. De-
6.	Mr. H. M	24	1910	Yes	Yes	Т. Р.	No	comp. Op. P. R. with defect.
7.	Miss A. K	22	1912	Yes	Yes	Т. Р.	Yes	P. R. with severe defect.
8.	Mr. C. M	55	1913	Yes	Yes	Т. Р.	Yes	Growing worse.
9.	Mr. L. McB	34	1913	Yes	Yes	T. P. Wassermann plus	Yes	2 Decomp. Op. Dementing.
10.	Mr. R. D	26	1913	Yes	Yes	Т. Р.	Yes	Demented.
11.	Mr. A. D	43	1913	Yes	Yes	Т. Р.	Yes	No improvement. Dled of bullet wound.
12.	Mr. M. C	35	1913	Yes	Yes	т. Р. *	No	P. R. with defect.

Average age, 33 7/12.

No complete recoveries at all.
50% Death or Demented States.
50% Partial Recovery with Defects.
Average age of Partial Recoveries with Defect, 26.
Average age ending in Death or Dementia, 43.

Of the traumatic neuroses all of the cases suffered physical and psychic trauma except two. In one of these cases where psychie trauma alone existed traumatic hysteria dominated the picture and in the other case severe physical trauma with no history of psychic trauma was followed by traumatic neurasthenia. Of these 27 cases 14 developed typical traumatic hystero-neurasthenia; and in 4 of these 14 cases pronounced hypochondriaeal symptoms complicated the picture. There were 3 eases of uncomplicated traumatic hysteria and 10 cases of uncomplicated traumatic neurasthenia. There were 12 men and 15 women in this group.

In the group of traumatic psychoses depressed fracture existed in one ease. In another organic dementia; in still another laceration of and hemorrhage into the brain itself; while in a fourth case a notation is made of the existence of a positive Wassermann. In the other 8 cases the traumatic psychoses were represented by delirious states of

all number 4, so that upon this basis the percentage of full recoveries following upon the traumatic neuroses is 30%. Partial recovery, in which after the lapse of at least two years many symptoms have disappeared but certain neurasthenic or hysterical symptoms persisted, is represented by 55% plus, and no improvement at all in 15% of the whole number.

Taking up now the matter of the possible influence existing between full recovery and money settlement for the traumatic neuroses, I have to report that where money settlement has been effected, full recovery has occurred in 6 cases, and partial recovery only, together with no improvement at all in 14 cases, the percentage of full recoveries after settlement being therefore 30%. I bring these figures to your notice because of the very general opinion which prevails that all of these cases recover promptly after money settlement has been effected. This is surely not the case.

although it is true that the immediate effect of settlement removes a certain stress and strain from the individual, and to this extent a consistent and immediate improvement may occur.

The average age of all the cases of tranmatic neurasthenia was 34 years.

The average age of those who made partial recoveries was 33 6/15 years.

The average age of those who made full recoveries was 33 5/8 years.

The average age of those which terminated in demented states or showed no improvement at all was 36 years.

Considering now the traumatic psychoses of which I have 12 cases to report, partial recovery with defect was made in 6 cases or 50% of the whole number and termination in death or dementia occurred in 6 cases or 50%, while full recovery did not occur in a single case.

The average age of the traumatic psychoses was 33 7/12. The average age of those which showed partial recovery with defect was 26, and of those which terminated in death or dementia was 43. In three cases the decompression operation was performed, and life was saved by this operation but all were followed by defect, severe moral perversion following one case and in the other two cases epilepsy preceded and followed the operation but the epileptic attacks were much milder and of less frequent occurrence after the operative procedure. In one case the decompression operation was indicated but was refused and the patient died.

Conclusions: The prognosis in the traumatic neuroses considered with reference to life is good. The prognosis for partial recovery with some defect is a little better than 55%, but with reference to complete cure it is only 30%. The prognosis in pure hysteria is better than in neurasthenia, but where these forms are combined the prognosis is worse than where they are not combined, and for complete cure is only fair—30%.

In a number of my cases the disability has existed for eight years, and bids fair to continue without any further improvement.

The majority of these cases, men and women alike, are at work, but their complaint is that they do not feel right, are tired, nervous and irritable. Of the three eases of pure tranmatic hysteria one made a partial recovery or 33 1 3%, and two made a full recovery or 66 2 3%. Of the cases of pure tranmatic neurasthenia 4 made a partial re-

covery or 40% and 6 made a full recovery or 60%.

Prompt money settlement has a direct influence upon the ultimate prognosis in the uncomplicated hysterical cases, but this influence is much smaller in the neurasthenics and in combined forms not possibly more than 30%c.

The provision of the law which places a premium upon the misfortune or the good fortune in being the victim of an injury, together with the adverse influence upon the patient of long drawn out trials, directly militates against the acceptance of early treatment and definitely affects the prognosis.

There is nothing about the neuroses in themselves which precludes recovery in the widest sense of the word; but it is manifest that full recovery does not occur in the majority of the cases. The question of working capacity very largely depends upon early and favorable treatment, getting to work early, and in the hysteric cases of prompt countersuggestion to remove delusionary impressions, instead of fostering them through repeated examinations, which serve to fix the attention of the patient upon himself.

The prognosis in the traumatic psychoses is good for a certain amount of improvement with defect, but for complete recovery is bad. Money settlement had no effect on permanent cure in one per cent of the psychoses.

The indications for snrgical interference in the tranmatic psychoses are very definite, and the earlier they come under the care of the surgeon the better will be the prognosis. A timely decompression operation in many cases will save life, because of the necessity of immediate relief of pressure. The prognosis for a certain degree of recovery in the tranmatic psychoses is better in the young than in those past middle life.

Ontside of this group there were three cases of malingering which if added to the total number would give an average of 7% of malingering in 42 cases. I am quite sensible of the fact that the number of my cases is too few to draw broad conclusions, and that each case and its prognosis is a problem in itself; but I have taken them up just as they came, and all that they represent is my personal experience.

If I may be excused for the digression and permitted to make a suggestion, it is to urge upon you the great necessity for the *early* and the *proper* treatment of these eases. It may be that the claimant at trial will be accorded less damages because

of his greatly improved condition; but as eompensation for this his chance for full recovery will be infinitely increased, the prognosis greatly better, scientific medicine will be vindicated, and you will help to lift out of the mire of medical disrepute one at least of the crying disgraces in our profession today.

# CAMP OF INSTRUCTION FOR OFFICERS OF THE MEDICAL RESERVE CORPS.

BY W. G. MERRILL, PH. C., M. D., 1ST LIEUTENANT M. R. C., GRAND RAPIDS,

Upon an invitation of the Surgeon-general a large number of the members of the Medical Reserve Corps of the U.S. Army were in attendance at Camps of Instruction as follows: Fort D. A. Russell, Wyoming, May 31-June 5; Fort Sam Houston, Texas, June 7-12; Fort Oglethorp, Ga., June 7-12; Presidio of Monterey, California, June 7-12; Tobyhanna, Pa., June 28-July 3; Sparta, Wis., July 12-17. The officers from North Dakota, Iowa, Missouri, Minnesota, Illinois, Michigan, Ohio, Indiana, and Wisconsin were assigned to Camp McCoy near Sparta. At the same time there were in camp the Sanitary troops of the Ohio National Guard comprising three Field Hospitals and two Ambulance Companies totaling 22 medical officers and over 200 men, together with Field Hospital No. 1 and Ambulanee Company No. 1 with their complete Field Hospital equipment, ambulances, pack trains, etc.

The instruction eonsisted of lectures each day by the medical officers of the Regular Army in attendance, upon such subjects as Duties of the Medical Department, Regimental Medical Officers, Ambulanee Companies, Field Hospitals, Camp Sanitation, Hygiene, Recruiting, Map Reading, etc. The balance of the program was devoted to praetical instruction in Drill School of the Soldier, Litter Drill, Ambulance Drill, Saber Drill, Review, etc. Then after all this preparation came the working out of a medico-military problem in the field in which two imaginary opposing armies, the Red and the Blue, were operating, and required for solution the proper distribution of Sanitary troops and the locating of the Field Hospital, Dressing Stations, and the care of the "sick" and "wounded". In eonnection with the working out of the problem the officers and men that day were also issued regular army rations and prepared their own meals therefrom while in the field.

On the last evening in camp the officers of the National Reserve Corps gave a banquet in honor of the Regular Officers, following which were a number of after-dinner speeches which were truly gems of rhetoric and wit and were well worth recording had provision for such been made.

All who availed themselves of this opportunity felt amply repaid for the time spent in attending this camp of instruction. They were unanimous in the praise of the Regular officers whose courteous treatment and painstaking efforts had made the week's stay so pleasant and profitable. The Regular officers were all gentlemen whom it was a pleasure to meet and were thoughtful of every comfort of those around them.

While most of the Reserve officers have held commissions in this corps several years and have been provided with copies of manuals, regulations, and other documents and the correspondence course, etc., this has been the first opportunity for those not members of the National Guard to get any experience in the field. The Medical Reserve Corps consisting as it does of medical men in private practice has needed this training to prepare its members for the duties which would devolve upon them should they be called into active service by reason of any emergency. It is expected that this will become an annual affair and that the attendance will be larger each year.

It is interesting to note the personnel of those in attendance. There were men present from all the states mentioned, some of whom were in general practice, others operating surgeons, and some were specialists in Eye, Ear, Nose & Throat, Gynecology and Obstetrics, Dermatology, Pathology, etc. Several were connected with medical colleges and two were deans.

The location of the eamp was excellent for the purposes and the sanitary arrangements all that eould be desired. There were good artesian water, shower baths, and no mosquitoes or flies to amount to anything.

# TETANUS: SITE OF INFECTION UN-KNOWN, RECOVERY.

BY J. R. LONGLEY, B. SC., M. D., FOND DU LAC.

When confronted with a patient with tetanus one must not give up in despair at any time, is the conclusion I have come to from the following case. An important point to bear in mind is to see that some druggist carries large units of serum, as well as the simple prophylactic dose. I was very much surprised to find nothing but preventative doses, and the druggists explained it by saying, "No physician ever called for a larger dose." However, we used the small doses and thanks to being close to market, we had the 3000 unit size in twenty-four hours.

Patient, Mrs. F. D., a house wife, called me July 16, 1914, complaining of a stiff jaw, at first appearing as an anterior dislocation; however, the next morning neck was very stiff.

Previous history revealed a bothersome toothache with absolutely no sign or history of an injury. Immediately I had R. J. Serwe, D. D. S., pry the decayed tooth out, for it was impossible to put on forceps.

July 17, gave 6000 units tetanus antitoxin intravenously.

The pulse was 84 except during clonic spasm when it went up to 130, temperature 99.4° to 101°.

July 18, 6000 units intravenously.

July 19, 6000 units intravenously.

July 21, 1500 units intravenously, A. M. Three very severe spasms.

July 21, 1500 units intravenously, P. M.

July 22, 1500 units intravenously, A. M.

July 22, 1500 units intravenously, P. M. Spasm 10:00 A. M.

July 23, 1500 units intravenously, A. M. 3000 units intravenously, P. M.

July 24, 3000 units intravenously.

July 27, 3000 units subcutaneously.

Patient could not take food, having great difficulty in swallowing. Later could be fed through feeding tube, so by the use of liquid foods seemed to get plenty of nourishment. Catheterization was necessary for a time.

The attitude of patient was characteristic. Arms flexed on chest, hands flexed on wrists, legs drawn up and abducted, so much that it was difficult to keep feet in bed.

Further treatment consisted of chloral and bromides, 15 gr. of each per rectum every three hours, and  $\frac{1}{4}$  gr. morphine hypodermatically at bedtime.

The patient was able to be up and about the last

of August, complaining only of a slight general stiffness.

I believe from my observation one should give first dose intraspinously as well as intravenously, then continue the intravenous doses; also that one should continue daily with the large doses, for in the above case, I skipped July 20th, and on the 21st, giving only a small dose in the A. M. There followed 3 severe spasms. At first I thought the serum given was too cold, but after talking with one well known laboratory man, I considered it a form of anaphylaxis.

The above case should have received serum immediately, however, it will serve to emphasize that treatment hours or days after onset may save many cases.

# **BOOK REVIEWS**

HISTORY. OF OPHTHALMOLOGY. THE OCULISTS OF AMERICA IN THE 19TH CENTURY. Hirschberg, J., Berlin. Graefe-Saemisch-Hess, Handbuch der gesamten Augenheilkunde, 2nd, entirely new, edition. 203 pp., with 18 figures in the text. Leipzig. Wilhelm Engelmann. 1915.

This part of Hirschberg's monumental History of Ophthalmology will be heartily welcomed in this country, as it is the first history of ophthalmology of the United States of such completeness and resourcefulness. Hirschberg says that in investigating the development of ophthalmology in the United States he encountered two difficulties. The first was due to the complicated conditions of the American higher schools. The second was due to the fact, that in the United States ophthalmology developed very slowly during the first half of the 19th century, a little more after its middle, but very powerfully after the seventies, so that for gaining a complete survey, one has to approach very near to the present day, thus encountering still unsolved questions and their living representatives over whom the historian has to withhold his judgment and must leave it to his successors.

Hirsehberg's sources, indicated in the bibliographies after the single chapters, were: the historical essays of American authors, as H. Friedenwald, A. Hubbell, and others, his familiarity with the American ophthalmological literature for the last 38 years, which, were carefully reviewed in his Centralblatt für praktische Augenheilkunde, his large library of American textbooks, monographs, annual reports of eye hospitals, ophthalmological societies, periodicals and encyclopedias, and his personal observations, made during his three journeys through the United States in 1887, 1892 and 1905. Here Hirschberg especially emphasizes that by careful utilization of the American literature he strived to avoid the wrong criticisms of the "rushing travelers."

After a discussion of the American Universities and Medical Colleges, with a complete list of these, the beginning of ophthalmology in the United States is described, with the foundation of eye hospitals, of which the eye infirmary, erected in 1817 at New London by Elisha North, was the first, and its cultivation by the pioneers, starting with George Frick, born in 1793 at Baltimore, and their works. Here a special essay on asthenopia and a complete history of asthenopia are inserted, as this subject has in the last third of the 19th century been very extensively and exhaustively investigated in this country and forms such a large part of the American literature. Then follow biographies and publications of the first eye specialists, born in the United States, as Henry W. Williams and Elkameen Williams, etc., or immigrated from abroad. The most eminent of these was Hermann Knapp who, Hirschberg says, eclipsed all American ophthalmologists of the 19th century. His life history with portrait and his great influence in developing the scientific spirit of this country are very well presented with enumeration of the titles of his more than 130 articles and books.

The new hospitals are described from their annual reports, then the ophthalmological periodicals and ophthalmological societies, text books of ophthalmology, monographs, symposia of the second half of the 19th century, and encyclopedias of the commencement of the 20th century, and the biographies of prominent American oculists of the second half of the 19th century, are given in more or less detail, but "de vivis nil."

In conclusion Hirschberg quotes the comments on American ophthalmology by two American authors, H. Friedenwald, 1912, and A. Hubbel, 1908.

Hirschberg's valuable book will not only be read with great interest and delight on account of its useful information and pleasant style, but will also arouse the gratitude of the oculists of America for having spent such an immense labor in producing an accurate picture of the ophthalmological conditions of their country. As the great handbook of Graefe-Saemisch-Hess is read all over the world, Hirschberg's conscientious work will greatly help to correct erroncous conceptions or entire lack of knowledge about this country, still largely prevalent abroad.

C. Zimmermann.

HISTORY OF OPHTHALMOLOGY, THE OCULISTS OF ITALY FROM 1800 to 1850. Hirsehberg, J., Berlin. Graefe-Saemisch-Hess, Handbuch der gesamten Augenheilkunde. Second, entirely new, edition. 107 pp., with 20 figures in the text and a title plate. Leipzig, Wilhelm Engelmann, 1914. It was only recently that we had occasion to announce the appearance of Hirschberg's masterly llistory of Ophthalmology in England in the first half of the 19th century, and now he presents the medical world with two new books of equal importance, the history of Italian Ophthalmology from 1800 to 1850, and that of American Ophthalmology in the 19th century, a review of which will be found in this volume of the Wisconsin Medical Journal. There was no preliminary publication on the history of Italian Ophthalmology of that period, so that Hirschberg had to create an entirely new work, based on his study of the Italian literature of ophthalmology. The biographies of the Italian promoters of ophthalmology were taken from incident sources, especially the necrologies of the Annali di Ottalmologia and from communications by Prof. G. Albertotti. Also the impressions gained by foreign and Italian surgeons during their travels in Italy were utilized.

The subject is arranged in form of successive histories of the chief schools, beginning with Antonio Scarpa, (1752-1832) at Pavia, the founder of the North Italian school, whose portrait we find on the title plate, and ending with the South Italian school, created by Gian Battista Quadri (1780-1851), from 1815 Professor of Ophthalmology in the University of Naples. Hirschberg says that the unification of Italy led to a fusion of the schools and an individual development which in the 2nd half of the 19th century, aside of the cultivation of the clinic, fostered an especially careful study of the normal, and pathological, anatomy, embryology, physiology, and experimental pathology, of the visual organ.

C. ZIMMERMANN.

On the Eye Symptoms in Diseases of the Nervous System. Uhthoff, W., Breslau. Graefe-Saemisch-Hess. Handbuch der gesamtem Augenheilkunde. Second, entirely new, edition. Nos. 255 to 258, p. 1489 to p. 1677. Leipzig. Wilhelm Engelmann. 1915. 8 M. \$2. These numbers conclude Uhthoff's great work on the eye symptoms in diseases of the nervous system, in which he utilized his personal experience, to a great measure gained, in many years, on the immense material of the Charité, and other large hospitals and insane asylums at Berlin, Marburg and Breslau, in conjunction with numerous well-known neurologists and psychiatrists: Hence the great authoritative value of the book.

In the excellent chapter on the ocular symptoms in progressive paralysis, U. says that literature containa great many exaggerated and erroncous statements of ophthalmoscopic changes, betraving lack of ophthalmoscopic schooling or prejudice, and gives statistics from his own material. According to this the frequency of progressive atrophy of the optive nerve is 8% and approximately corresponds with that in tabes, which U. found from 8 to 10%. The most important diagnostic and prognostic phenomena are the pathologic changes of the pupils. U. found reflex iridoplegia in 44 %, tardy reaction to light 16%, difference of size 22%, miosis 21%, marked deficiency of roundness 25%, ocnlar palsies in 10%. Of great interest are the differential diagnostic remarks setting forth the great value of ocular symptoms in progressive paralysis, in comparison to some other diseases of the nervous system.

The next chapters deal with the eye symptoms in idiocy and imbecility, dementia praecox, dementia senilis, epilepsy and functional psychoses. 39 pages are devoted to the eye symptoms in hysteria, which U. believes are called upon to give important diagnostic clues. H. belongs to those who attribute to the marked concentric contraction of the visual field considerable significance in hysteria. Finally hallucinations and illusions from diseases of the visual organ are discussed. After each chapter a complete bibliography is given.

C. ZIMMERMANN.

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A. W. MYERS, M. D., Editor 141 Wisconsin Street, Milwaukee J. P. McMAHON, M. D., Managing Editor 141 Wisconsin Street, Milwaukee

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No. 3

# EDITORIALS

# HONOR ROLL.

THE COUNTY SOCIETIES LISTED BE-LOW ARE MEMBERS OF THE HUNDRED PER CENT. CLUB OF THE STATE SOCIETY, WHICH MEANS THAT ON AUG. 1ST THEIR MEMBERSHIP EQUALLED THEIR MEM-BERSHIP AT THE CLOSE OF 1914. THOSE MARKED WITH A STAR HAVE INCREASED THEIR MEMBERSHIP OVER LAST YEAR. IS YOUR COUNTY IN THIS LIST OF PRO-GRESSIVE SOCIETIES? IF NOT, ASK YOUR SECRETARY TODAY WHY IT IS NOT AND ASK WHAT YOU CAN DO TO HELP PUT IT THERE. IF YOU OR YOUR NEIGHBOR HAVE FAILED TO PAY YOUR 1915 DUES YOUR ARE HOLDING YOUR SOCIETY WHAT CAN YOU DO TO GET A NEW MEMBER OR TO REINSTATE A DE-LINQUENT? WILL YOU HELP?

CHIPPEWA. COLUMBIA.

MONROE.

LUMBIA. PRICE-TAYLOR.

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DODGE. RUSK.\*
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IOWA. LA CROSSE.\* LANGLADE.

WAUKESHA. WAUPACA.\*

MANITOWOC.
MARATHON.

W00D.\*

Rock Sleyster, Secretary.

# THE SIXTY-NIXTH ANNUAL MEETING.

The time for the next meeting of the State Medical Society of Wisconsin is approaching rapidly and the dates, October 6 to 8, must be kept free at all costs. These meetings have grown to be so important a part of our medical lives that nothing must be allowed to interfere with our presence at them. The change in the time from May to October seems to be so universally satisfactory and the October meeting at Oshkosh last year was so large and successful that there is every reason to expect another record-breaking gathering at the Sixty-ninth Annual Meeting at Milwankee.

The preliminary program is given on another page of the Journal and it will be seen that a large variety of interesting topies are to be brought up for disenssion. We say "for discussion" advisedly, for one of the chief aims of the Program Committee has been to eneourage discussion of the papers. With this idea in view the number of papers on the program has been limited so that there will be ample time for a full discussion of each paper. Everyone who wishes to present his views will be able to get a hearing. In the past the number of papers has usually been too great for the time at our dispossal and the result has been such a feeling of haste that many of the members have hesitated to enter the discussion even of subjects in which they were particularly interested.

The Annual Addresses in Surgery and Medieine will be by men who are "making history" in their separate departments and we may feel assured that these features will be of unusual importance.

The Symposium on Accident Surgery and Work-

men's Compensation is bound to bring out an interesting discussion for many of the questions related to these complicated matters are still far from their final settlement.

The same may be said of the Symposium on Caneer. We all need to know more about the subject. All that is known is little enough and we cannot afford to miss any of it.

It is not possible to speak of each subject which will be presented but the variety is great and there will be something for every taste.

All the meetings will be held in the Hotel Wisconsin, 172-180 Third Street, half a block north of Grand Avenue.

Ample accommodations have been provided for the scientific meetings, the meetings of the House of Delegates and its committees, the commercial exhibit, etc. The Annual Smoker and Entertainment will be held in the Badger Room of the Hotel Wisconsin, Thursday evening October 7, so that everything will be under one roof. This will be a great convenience to all the members of the Society, and the central situation of the place of meeting will commend itself to the visitors to Milwaukee as well as to the resident members of the Society.

The meetings of the Wisconsin Eye, Ear, Nose and Throat Specialists and the Wisconsin Medical Woman's Society are to be held immediately before and after the State Medical Society meeting. Full programs of both of these meetings will be published in the September Journal.

Quite apart from the scientific program is the program of good-fellowship, the cultivation of which is quite as necessary to our full growth and development in the medical profession as it is in any walk of life. There is no time or place equal to a meeting of the State Medical Society for forming and continuing lasting friendships with our brethren in the profession. Let us make the most of each of them as the years roll by and let us make the coming meeting memorable for its spirit of loyalty and fraternity.

# TWO NEW LAWS OF IMPORTANCE TO THE MEDICAL PROFESSION.

The new "Eugenic Law" and the recently passed amendment to the "Anti-Fee-Splitting Law" are of such importance to the medical profession that we give them in full below, although times does not permit their editorial consideration in this number of the Journal.

No. 364 A.]

[Published August 12, 1915

CHAPTER 525, LAWS OF 1915.

AN ACT To repeal subsections 3, 4 and 5, and to amend subsections 1, 2, 6 and 7 of section 2339m of the statutes, relating to marriage and venereal diseases.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

Section 1. Subsections 3, 4 and 5 of section 2339m of the statutes are hereby repealed.

Section 2. Subsections 1, 2, 6 and 7 of section 2339m of the statutes are amended to read: (Section 2339m) 1. All male persons making application for license to marry shall at any time within fifteen days prior to such application, be examined as to the existence or nonexistence in such person of any venereal disease, and it shall be unlawful for the county elerk of any county to issue a license to marry to any person who fails to present and file with such county clerk a certificate setting forth that such person is free from \* \* \* venereal diseases so nearly as can be determined by a thorough \* \* \* examination and by the application of the recognized clinical and laboratory tests of scientific scarch, when in the discretion of the examining physician such clinical and laboratory tests are necessary. When a microscopical examination for gonococci is required such examination shall upon the request of any physician in the state be made by the State Laboratory of Hygiene free of charge. The Wassermann test for syphilis when required shall upon application be made by the psychiatric institute at Mendota free of charge. Such certificate shall be made by a licensed physician, shall be filed with the application for license to marry, and shall read as follows, to-wit:

- Cignature of Physician.)

  2. Such examiners shall be physicians duly licensed to practice in this state. \* \* \* The fee for such examination to be paid by the applicant for examination before the certificate shall be granted, shall not exceed \* \* \* two dollars. The county or asylum physician of any county, shall, upon request, make the necessary examination and issue such certificate, if the same can be properly issued, without charge to the applicant, if said applicant be indigent.
- \* \* \* 3. Any county clerk who shall unlawfully issue a license to marry to any person who fails to present and file the certificate provided by subsection 1 of this section, or any party or parties having knowledge of any matter relating or pertaining to the examination of any applicant for license to marry, who shall disclose the same, or any portion thercof, except as may be required by law, shall upon proof thercof be \* \* \* punished by a fine of not more than one hundred dollars or by imprisonment not more than six months.
  - \* \* \* 4. Any physician who shall knowingly and

wilfully make any false statement in the certificate provided for in subsection 1 of this section shall be \* \* \* punished by a fine of not more than one hundred dollars or by imprisonment not more than sfix months.

Section 3. This act shall take effect upon passage and publication.

Approved August 10, 1915.

[No. 785 A.] CHAPTER 469, LAWS OF 1915.

AN ACT To amend subsection 1 and create subsection 2a of section 4431b of the statutes, relating to feesplitting by physicians.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

Section 1. Subsection 1 of section 4431b of the statutes is amended to read: (Section 4431b) 1. Any physician or surgeon who shall claim or demand and collect and receive any money or other thing of value as compensation for his professional services in treating or operating upon a patient who was induced or advised by another physician or surgeon to submit to such treatment or operation, and who shall have previously paid or delivered, or shall thereafter pay or deliver, any money or other consideration to such other physician or surgeon or his agent, as compensation for such inducement or advice, or as compensation for assistance in the case, or any physician or surgeon, giving such inducement or advice, who shall, as compensation therefor, or as compensation for assistance in the case, demand, receive or retain any moncy or other consideration directly or in directly from the physician or surgeon treating or operating upon the patient so induced or advised, shall be guilty of a criminal fraud and upon a conviction thereof shall be punished by a fine of not more than one hundred dollars or by imprisonment in the county jail not exceeding six months. Such conviction shall operate also as an annulment of the license held by the convicted person to practice as such physician or surgeon.

Section 2. There is added to section 4431b of the statutes a new subsection to read: (Section 4431b) 2a. Any physician, surgeon, nurse, anaesthetist, or medieal assistant or any medical or surgical firm or corporation who shall render any medical or surgical service or assistance whatever or give any medical, surgical or any similar advice or assistance whatever to any patient for which a charge is made from such patient receiving any such service, advice or assistance, shall render an individual statement or account of his charges therefor directly to such patient, distinct and separate from any statement or account by any other person, firm or corporation having rendered or who may render any medieal, surgical or any similar service whatever or who has given or may give any medical, surgical or any similar advice or assistance to such patient. Any violation of this provision shall be punishable by the penalty preseribed in subsection 1 of this section.

Section 3. This act shall take effect upon passage and publication.

# A SYMPOSIUM ON HODGKIN'S DISEASE.

It has been suggested that a symposium on Hodgkin's Disease, to be given by the group of Wisconsin men who have been working on this subject during the last few years, might be of great interest to the members of the State Medical Society. A tentative plan has been proposed to hold a meeting of this character on the evening of October 5, at some convenient location to present the subject of Hodgkin's Disease from the clinical, pathological, and experimental standpoints, and if possible to demonstrate a series of cases. If the plan develops full details will be given in the September Journal.

# ANNUAL MEETING OF THE WISCONSIN EYE, EAR, NOSE AND THROAT SPECIALISTS.

The second annual meeting of the Wisconsin Eye, Ear, Nose and Throat Specialists under the anspices of the Milwaukee Oto-Ophthalmic Society will be held in Milwaukee on October the 8th and 9th, 1915.

On October the 8th the day will be devoted to the reading and discussion of papers, and on the following day, October the 9th, the time will be devoted to clinical work at the different hospitals in the city.

# PROVISIONAL PROGRAM OF NEXT MEET-ING.

To the Editor:

Although the final touches have not been put on our program for the October meeting, we are able to give some idea of the good things to be expected by publishing at this time an almost complete list of the papers and subjects. It is the desire of the Program Committee that more time be allowed for general discussion than we have usually had heretofore. A too lengthy program has often necessitated a curtailment of discussion. This year we want everybody to come prepared to participate in the discussion of some of the live topics included in the following list. A complete program will be published in the September Journal.

Respectfully yours.

CHESTER M. ECHOLS.

Chm. Program Com.

## PROVISIONAL PROGRAM.

69TH ANNUAL MEETING OF STATE MEDICAL SOCIETY OF WISCONSIN, MILWAUKEE, OCT. 6-8, 1915.

President's Address, T. J. Redelings, Marinette. Some Acute Abdominal Emergencies, D. R. Connell, Beloit.

Bifurcation of the Transerve Process of the Fifth Lumbar Vertebra, with Report of a Case, Wilson Cunningham, Platteville.

Non-Diabetic Acetonemia, M. R. Wilkinson, Oconomowoc.

**Focal Infections and Their Relation to Diabetes**, H. P. Greeley, Waukesha.

Diagnostic Value of the Systolic Blood Pressure, J. W. Fisher, Medical Director of the Northwestern Mutual Life Insurance Co., Milwaukee.

Oration in Surgery. Subject to be announced, Prof. Fred T. Murphy, head of Department of Surgery, Washington University, St. Louis, Mo.

Symposium on Accident Surgery and Workmen's Compensation.

- 1. Problems in Awarding Compensation, by a member of the Industrial Commission.
- 2. Borderline Cases Under Our Compensation Law, E. W. Quick, Milwaukee.
- 3. Hernia and Orchitis in Relation to Accidents and Compensation, A. H. Levings, Milwankee.

Oration in Medicine, "The Internal Secretions," illustrated by lantern slides, Prof. Lewellys F. Barker, Baltimore, Md.

Wassermann Tests and Cerebro-spinal Fluid Examinations, Free of Charge, W. F. Lorenz, Director Wisconsin Psychiatric Institute, Mendota.

The Schick Reaction in the Milwaukee Isolation Hospital Work,—A Preliminary Report, Leopold Schiller, Milwaukee.

Symposium on Cancer.

- 1. Experimental Investigations on Cancer, Illustrated by lantern slides, Prof. H. Gideon Wells, University of Chicago, Chicago, Ill.
- 2. Pre-cancer Lesions, Wm. E. Ground, Superior.
- 3. Cancer of the Lip, V. F. Marshall, Appleton.

The Harrison Law and Its Relation to Drug Habitnes, Adin Sherman, Superintendent Northern Hospital for Insane, Oshkosh.

Feeble Mindedness in Relation to Constructive Legislation, Mary E. Pogue, Lake Geneva.

Analgesia and Semi-narcosis During Childbirth, Charles A. Wright, Delavan.

# ARRANGEMENT COMMITTEE REPORT.

The Annual Meeting of the State Medical Society of Wisconsin will be held in the Hotel Wisconsin, 172-180 Third Street, Milwaukee, October 6-7-8, 1915. All sessions, including business, scientific, etc., will take place in this building, making it unnecessary for members to go from one place to another. The Gold Room, on the first floor, will be used for general meeting purposes. and other smaller rooms, adjacent to the convention hall, will be available for committee meetings. The Colonial Room, on the lobby floor, has been placed at the disposal of exhibitors, and this space has been virtually all taken, so that anyone contemplating an exhibit at this meeting, must make his reservation at once, in order to secure accommodation. The second evening, Thursday, October 7th. 1915, will be given over to the Annual Smoker and Entertainment. This is a strictly informal affair. and everyone should plan to attend, as we shall have something of a surprise in store for them. The management of the Hotel Wisconsin is making every effort to meet our demands, and to make the meeting at their hostelry as enjoyable as possible. A more complete announcement, together with a list of exhibitors, will be made in the next issue of the Journal.

> Robert W. Blumenthal, Chairman Arrangement Committee.

#### NEWS ITEMS AND PERSONALS

Dr. D. F. Gosin, county and city physician of Green Bay, has resumed his practice after a summer's post-graduate work at Rochester, Minn., and various Chicago hospitals.

Dr. E. H. ROGERS. Stevens Point, is convalescing from an operation performed on one of his knees on June 18th at Mercy Hospital, Chicago.

Dr. Clarence M. Cheadle, Rockford, Ill., for some months a lecturer and special investigator with the Wisconsin Anti-Tuberculosis Association. has entered the employ of the Servian government. in stamping out typhus, cholera and other diseases which have developed among the civilian population as a result of unsanitary conditions due to the war.

Dr. E. B. Frisbie has resigned his position as first assistant surgeon at the Milwaukee Soldiers Home. Dr. R. J. Elliott has been promoted to succeed him.

Drs. D. F. Gosin and H. C. Mix have formed a partnership for the practice of their profession at Green Bay.

Drs. Sattre and Charron have purehased the Rice Lake Hospital, which has been remodeled and is now open to receive patients. Dr. E. J. Knapp has installed a modern X-ray and fluoroscopic outfit, and many other facilities have been added to promote careful scientific work.

Dr. William Halsey, Milwaukee, has been appointed head of a government hospital training school now being constructed on Goat Island, San Francisco, for recruits in the naval training station.

Plans for the opening of health stations at two of Milwaukee's public schools are being perfected by Health Commissioner Ruhland. It is planned to hold three clinies a week at night, and it is hoped to interest charity organizations of the city when the results have demonstrated that good work is being done for the poor.

After an existence of twenty-two years, Lakeside Hospital, Milwaukee, will close its doors on September 1st. Dr. Horace Manchester Brown, head of the institution says that the erection of the Ford Motor Company's assembling plant, on the site opposite the hospital, is the direct cause of the closing of the hospital.

The Board of Trustees of the new Milwaukee County Tuberculosis Sanatorium have selected Mnirdale Sanatorium for the Treatment of Tuberculosis as the name of the new sanatorium.

A new free medical dispensary will soon be established in Milwankee. Under the will of the late Mrs. Matthew Keenan of Milwankee, \$300,000 has been set aside for the work.

Negotiations are under way to seeure the Greenfield Sanatorium as a preventorium for the children that come under the care of the Milwaukec Society for the Care of the Sick.

# MEDICAL LIBRARY ASSOCIATION.

Headquarters, 1211 Cathedral Street, Baltimore. Md.

Founded-May, 1898.

Object—The fostering of medical libraries and the maintenance of a system for exchange of medical literature among them.

Membership—Any Medical Society, Association, University, or College have a fixed home and a library of at least 500 volumes, with a Librarian or other attendant in charge.

Any individual interested in Mcdical Literature or Libraries.

Dues—Library Membership, \$10.00. Individual Membership, \$5.00.

Benefits—The banding together of a united body with a common cause. The betterment of conditions in Medical Libraries from interchange of opinions, methods, etc., thus placing up-to-date tools, for the public good, in the hands of physicians.

The Exchange—A Clearing House through which books, journals and reprints, or lists of these, may be sent from one Library to another.

How to Get Books From the Exchange—State your "Wants" plainly, on eards if possible, giving only one title to each card.

The list of journals accompanying the Index Catalogue of the Surgeon General's Office will be found invaluable in furnishing information as to volumes and dates of sets which are incomplete. In making lists of books, give the author's name and initials (using Cutter's colon abbreviations for given names) the full title, edition, place of publication, number of volumes, and date. List reprints in the same manner, putting the word "Reprint" in brackets after the title.

Notify the Manager of the Exchange promptly when shipments are received from headquarters and when "Wants" are supplied from other sources. Remember that to supply a special work it is sometimes necessary for the Manager to apply to every member in turn and that this takes time.

Be glad to give more than you receive, as the needs of the new small library are many and those of the older ones few.

How to Help the Exchange—By soliciting books or journals from publishers, physicians, authors and libraries. By contributions of books, reprints or funds to carry on the work. By listing all duplicate material and holding same until such list have been sent through the Exchange to members for selection.

#### REMOVALS

Dr. E. A. Hermsmeier has located at Clyman,

Dr. P. C. Dierschke, has removed from Milwaukee to Columbus.

Dr. Sarah W. Alexander, Hudson to High Bridge. Dr. Sylvester C. Allen, Milwaukee to Waterloo. Dr. G. M. Smith, Eau Claire to Mondovi.

Dr. Leonard Harriman, Lake Mills to Stillwater, Minn.

Dr. J. L. Reeve, Superior to Lake Nebagamon. Dr. R. D. Shearer, Milwaukee to Sincoe, Ontario, Canada.

Dr. Henry Newton Winn, Madison to Poynette. Drs. E. M. and Ida H. Hunt, who recently disposed of their practice at Tigerton, have located at Aniwa.

Dr. F. D. Brooks, has disposed of his practice at Fox Lake to Dr. Rosenheimer of Milwaukee, and will locate in the east.

Dr. J. W. Emmons, Orfordville, has disposed of his practice to Dr. Geo. W. Belting of De Soto.

Dr. F. M. Scheele, late of the Milwaukee County and Emergency Hospitals, has located in Milwaukee for the practice of his profession.

# MARRIAGES

Dr. George Ambrose Steele, Redgrauite and Miss Edna Rasmussen, Chicago, July 19th.

Dr. Thomas Judge, Milwaukee, and Miss Florence Wagner, Mitchell, South Dakota, Aug. 1st.

Dr. F. A. Stratton and Miss Fannie Berthelet, both of Milwaukee on August 4th.

#### DEATHS

Dr. J. B. Hitchcock, Montfort, died on July 28, at Long Beach, Cal., aged 66 years. Death was due to Bright's Disease. He was a graduate of the Iowa Medical College, Keokuk, Iowa, in 1880. He had practiced his profession at Montfort for thirty years.

Dr. Gaylord E. Pitts, Mt. Horeb, was killed on July 28th, when he was struck by a passenger train of the Northwestern road, while crossing the tracks. Dr. Pitts was 34 years old. He was a graduate of the Platteville Normal, and in 1910 graduated from the Northwestern Medical College. Dr. Pitts was a member of Dane County and the State Medical Societies.

Dr. Alois Driessel, West Bend, died after a year's illness, on July 31, aged 33 years. He was born at Hilbert, Wisconsin, January 16, 1882. Later he removed with his parents to Lomira. He attended the seminary at St. Francis, and subsequently entered the Milwaukee Medical College, from which institution he graduated in 1906. He first located at Boltonville and then at St. Cloud, and about five years ago removed to West Bend,

where he was associated with Dr. G. A. Heidner. He was a member of Washington County and the State Medical Societies.

# **BOOK REVIEWS**

The Heart in Early Life, by G. A. Sutherland, M. D., F. R. C. P., Senior Physician to the Hampstend and North-West London Hospital, Physician to Paddington Green Children's Hospital, London. 207 pages. Price, \$2.00. Oxford University Press, 35 West 32nd Street, New York.

Dr. Sutherland has produced a very satisfactory and readable book on an important subject. His view of cardiac disturbances both functional and organic is broad enough to include the whole patient and in discussing the subject of treatment in every section of the work the emphasis is laid upon the necessity for treating the patient and not the murmur.

The work is based upon the most modern conceptions of cardiae disease and can be read with enjoyment and profit by every practitioner of medicine.

Guide to Expert Testimony on Injuries of the Eye. Zur Nedden, M., Professor, Düsseldorf. 52 pp. with 2 figures in the text. Second edition. Wiesbaden, J. F. Bergmann. The first edition met with general approval and gave rise to discussions and clearing of discrepant views. The author utilized these in the 2nd edition by changing and enlarging some of its sections. Thus the methods of testing stereoscopic vision and of detecting simulation are given. Detachment of the retina, malignant tumors, lies, especially parenchymatous keratitis, as consequences of accidents are discussed, in addition to the topics mentioned in our former review. The useful work will also in its new form be found to be of great practical value.

EXAMINATION OF COLOR SENSE FOR RAILWAY AND MARINE SERVICE. Rosmanit, J., Wien. 59 pp., with 2 figures in the text and a plate. Wien and Liepzig. Wilhelm Braümüller. 1907. 1 Mk. \$0.25. After a very lucid exposition of the different types of anomalies of the color sense, based on the investigations of von Kries, Nagel, and Collin, R. discusses the various methods of testing them. He considers the examination with Stilling's pseudo-isochromatic plates and Holmgren's skeins, prescribed by the Austrian railways and merchant marine, as insufficient and propounds his reasons for it. In his opinion Nagel's plates are the only useful method for general practice which allows of the diagnosis of both systems of disturbances of the color sense, the dichromates and the anomalous trichromates. and their especial forms. Detailed descriptions of the plates, of Nagel's apparatus for equalization of colors. and Nagel's anomaloscope for clinics and doubtful cases. are given, with directions for their use. Finally R. shows how unsatisfactory are the so-called practical examinations on the road itself. The little book is an excellent guide which gives in a concise form all that is essential to know for practical purposes and deserves the highest recommendation.

# THE STATE MEDICAL SOCIETY OF WISCONSIN

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NEXT ANNUAL SESSION, MILWAUKEE, OCTOBER 6-8, 1915.
The Wisconsin Medical Journal, Official Publication

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# SOCIETY PROCEEDINGS

#### CALUMET COUNTY

The Calumet County Medical Society held its annual outing at Wolf Lake on July 15th.

#### DOUGLAS COUNTY

Members of the Douglas County Medical Society paid their annual visit to the county asylum at Parkland on July 20. The members were entertained at a banquet by Supt. W. J. Conness. Following the banquet a thorough inspection of the asylum was made. After the inspection of the asylum Dr. C. H. Mason read a paper on Medical Ethics. Dr. W. J. Zwickey discussed Insanity, illustrating his address with instances that had come under his care as physician at the asylum.

## FOND DU LAC COUNTY

Hospital Organization was the subject of an address which Dr. F. S. Willey delivered on July 14 at the meeting of the Fond du Lac County Medical Society, held at Mt. Calvary. Dr. Willey's address had to do with the movement which has been started at St. Agncs' Hospital, Fond du Lac to put the institution on a better basis. It is proposed to have the city commission take control of the free beds at the hospital. Members of the city commission and newspaper men were guests of the society.

#### RACINE COUNTY.

The regular meeting of the Racine County Medical Society was held June 24th at the Lakeside Hotel, Brown Lake, Racine County. Dr. Herbert W. Powers of Wauwatosa, addressed the meeting on the subject of "Prognosis of the Drug Habit."

Dr. W. E. White of Burlington was duly elected a member of the society.

The attendance was good.

SUSAN JONES, M. D., Secretary.

#### SHAWANO COUNTY

A meeting of the Shawano County Medical Society was held on July 28th at the Iroquois Club rooms. A clinic was held at the hospital in the afternoon, where Dr. J. B. Thompson performed an operation. The society was entertained at supper by Dr. L. Rothman.

# WAUKESHA COUNTY

The regular meeting of the Waukesha County Medical Society was held at Dr. Woodhead's residence, Waukesha on July 8th. Rain and bad roads prevented a full attendance. A paper on Arterial Sclerosis was read by Dr. A. J. W. Nixon of Delafield.

## WOOD COUNTY.

The Wood County Medical Society held its quarterly meeting in the directors' room of the Wood County National Bank, on July 21, with the president, Dr. Hugh

F. Waters in the chair. The program was as follows: Laboratory Diagnosis of Typhoid, Dr. W. G. Sexton; Surgery in Typhoid, Dr. V. A. Mason; Treatment of Typhoid, Dr. J. J. Looze. Dr. George Waters of Memphis, Mich., was present, and upon request gave a talk on Camp Sanitation, which was of special interest, as he had just been in attendance at a camp of instruction for officers of the Medical Reserve Corps of the United States Army.

W. G. MERRILL, M. D., Secretary.

#### NINTH COUNCILOR DISTRICT.

The midsummer meeting of the Ninth Councilor District Medical Society was held at Waupaca on July 31. Dinner was followed by a scientific program. Dr. O. M. Layton, Fond du Lae, spoke on Positive Therapeutics. Dr. J. L. Yates of Milwaukee on Hodgkin's Disease. About fifty physicians attended.

# **BOOK REVIEWS**

NEUROLOGY OF THE EYE. A Handbook for neurologists and ophthalmologists. Vol. VI. The Diseases of THE CHIASM. Wilbrand and Saenger, Hamburg. 292 pp., with numerous illustrations in the text, and 16 plates. Wiesbaden, J. F. Bergmann. 1915. 17 Mk. \$4.25. After a general survey over the diseases of the chiasm, the visual disturbances caused by them are discussed: bilateral amaurosis, sudden bitemporal hemianopsia, the finer diagnostics with reference to the course of fibres, excellently portrayed on anatomical plates, and nature of the visual disturbanees and their production by diseases of the chiasm, mostly due to interruption of conduction by pressure, respectively atrophy of the visual path from nutritive disorders, or separation of continuity by traumatism. Under the alterations of the visual field the typical bitemporal hemianopsia and its numerous modifications occupy the greatest space. Then the course of the visual disturbances, rapid or slow, the striking changes in their intensity and the form of the defeets of the visual field, the behavior of central vision and pupils, ophthalmoscopic conditions, accompanying phenomena, as headache, implications of ocular and other cranial nerves, etc., are considered. In the section on etiology the tumors receive a very exhaustive presentation, including the concomitant affections of the tumors of the hypophysis, as akromegaly, glycosuria, hypophysial dystrophy, etc., in the 2nd place syphilis, espe cially the basalar gummatous meningitis, then tuberculosis, internal hydrocephalus, multiple sclerosis, injuries and congenital defect of the chiasm. The final chapter is devoted to the operations on the hypophysis, considering the indication and the operative results up to 1913.

A bibliography of 742 numbers shows the immense amount of literature which has been utilized also in this volume of the magnificent encyclopedic work, in every respect, abundance of material, symptomatology, pathologic anatomy, and clinical histories, equal to its admirable predecessors. The unusual number of excel-

lent plates greatly adds to the understanding of the complicated symptoms of a great number of affections of the chiasm. A table of contents and index of authors and subjects facilitate orientation.

C. ZIMMERMANN,

# **ABSTRACTS**

EXPERIMENTAL AND CLINICAL INVESTIGATIONS ON THE INHIBITORY AND BACTERICIDAL EFFECT OF ANILINE COLORS ON GERMS PATHOGENIC TO THE EYE. Roemer, Paul, Gebb, H., and Lochlein, W., (from the eye clinic of Prof. Paul Rocmer in the University of Greifswald, Von Graefe's Archiv. für Ophthalmologie, 87, p. 1), give in the introduction to this elaborate cssay an historical review, showing how after the discovery of staining bacteria with coal tar colors by Carl Weigert in 1875, this method was used for coloring living cells and how their detrimental influence on the cells was observed. Behring was the first who studied systematically the inhibitory and bactericidal effect on some species of bacteria, mentioning the important observation, that the sensibility of various kinds of bacteria to anilin colors is entirely independent of their virulence, which was not sufficiently heeded by later authors. Thus Stilling based his claim of the antiseptic properties of methyl violet only on its effect on bacteria of putrefaction, staphylococcus pyogenes aureus, bacillus subtilis and anthracis, because these are more resistant than pathogenic micro-organisms. He therefore did not consider in his bacteriological experiments the germs most important for the ophthalmologist, partly of course, because they were still unknown (diplococci) or their cultivation not customary (pneumococci, gonococci). Stilling ascribed the bactericidal power of the anilin colors to merely mechanical action, whereas they also must have a specific chemical influence on certain kinds of bacteria.

The present authors report on their experiments by which they studied with modern technic and utilization of the experiences gained since that time the action of anilin colors on bacteria for ophthalmological purposes. First the inhibitory and bactericidal properties of anilin colors on staphylococci, pneumococci and gonococci, streptococci, diplococci and xerosis bacilli in the test tube were investigated with the result that the various germs pathogenic to the eye were differently influenced by the same anilin color. In harmony with the observations of Vogt the bactericidal effect was predominantly a property of the basic anilin colors. But this rule was not without exception, as the three colors which were most affectual on pneumococci: azoflavin, rose bengale and victoria yellow belong to the acid colors. As the resistance of different strains of the same species of bacteria to the same injurious substance undoubtedly varies, the thought suggested itself whether this could be climinated by simultaneous action of several colors, whose efficiency had been proved. Hence as far as it was chemically possible for each pathogenic germ a mixture of colors, bactericidal for this germ, was employed, with positive results.

For investigating how a complete sterilization of the conjunctival sac before operations could be obtained a combination of these mixtures was tested and was found successful against staphlylococci, streptococci, diplobacilli and xerosis bacilli, but not against pneumococci, which require a mixture of acid colors. This however could not be added to the polyvalent basic mixture against the former germs, for chemical reasons. Therefore the second mixture had to be used later, after the first had been applied. The color mixture compared with the common antiseptics were superior to these, excepting 20% protargol.

The study of the action of the specific mixtures of colors on the eyes of rabbits and man showed partly transient irritations, but no deleterious effects. Therefore they answer the first principle of chemo-therapy: slight organotropic, respectively ophthalmotropic, and high bacteriotropic titre. With regard to the diminution of concentration by the tears and conjunctival secretions and the time of their retention in the conjunctival sac the color mixtures must be employed in such concentration, that their bactericidal effect is assured in a very short time, as the experiments, c. g., showed that one minute after instillation into the conjunctival sac the concentration was only about 1/15.

The experiments on the action of the mixtures on the infected eyes of rabbits showed the same bactericidal effect as in the test tube. The authors then applied the colors and their mixtures in infectious external diseases of the human eye. The effect in pneumococcus conjunctivitis was uncertain, in serpent ulcer negative. In diplobacillus infections it shortened the duration of the disease so materially, that its application is urgently recommended. In gonoblennorrhea of children the therapeutic and prophylactic applications of the respective mixtures were very encouraging. The same mixture, effective against gonococci, was tested in 30 trachoma patients and found very valuable. In staphylococcus infections the results were not as positive as in diplobacillus infections, but a number of cases reacted very favorably to the specific mixture, showing a diminution of the profuse suppuration and bacteriologically a decrease of the staphylococci.

C. ZIMMERMANN.

INFLUENCE OF RED-GREEN BLINDNESS IN STUDY OF MEDICINE. Jerchel, E., (Zeit. f. Sinnesphysiologie, 47, p. 1), who is a typical deuteranope, studied systematically the peculiarity of his color sense in the different branches of medicine. He was mostly handicapped in those which require a fine distinction of colors, chiefly in bacteriology, dermatology and ophthalmology, especially ophthalmoscopy. The deficiency in diagnostics due to the lack of certain color perceptions could to some extent be supplanted by a gradually increased sensitiveness to differences of brightness through exercise and utilization of other characteristics.

C. ZIMMERMANN.

HOSPITAL FOR PREVENTION OF BLINDNESS. Ostrogorsky, A. (Western ophthal. 1913-14, vol. 30, p. 398). The activity of the curatorium for the prevention of blindness in Russia consists in the organization of flying ophthalmological columns, foundation of stationary eye hospitals, and similar institutions. According to the report of Ostrogorsky in 1911 existed 142 columns for the purpose of giving permanent, free aid to the poor populations of regions, mostly afflicted with eye diseases. From 1893 to 1911, 3,201,770 eye patients were admitted and 794,276 operations performed, 85,688 had incurable blindness caused in the first place by glaucoma, viz., in 21.9%, according to the reports of the hospitals and 25.1% of those of the columns, trachoma in 14.6% and 17.7%, diseases of the cornea in 14.3%and 12.7%, smallpox in 10.8% and 10.3%, etc. Curable blindness was noted 96,879 times, mainly due to diseases of the lens, 41.9% and 49.9%.

C. ZIMMERMANN.

Ocular Examination of Schools. Pape, R. (Der Schularzt, 1914, No. 3, p. 243), reports that in the principality of Lippe the vision of 25,700 children, mainly of the rural population, were examined by specially instructed teachers. From the teachers' returns the whole country was divided into examination districts and in each a place was designated where the children with diseased eyes were assembled and examined by an oculist.

C. ZIMMERMANN.

ADENOMA OF THE LIDS. Fehr, Berlin. (Centralbl. f. prakt. Aug., 39, p. 1). A woman, aged 65, noticed 9 years ago a pimple at the border of the right lower lid, which gradually grew, especially in the last two years. A brownish, red, tough tumor, 3 em. long, 2 em. wide, 1 cm. high, was situated with a long thin base like a polyp on the lateral 2/3 of the lid border, without encroaching upon the conjunctiva or skin. Its surface was nodular, moist, and lobulated by grooves and indentations. The lower lid was ectropic from the weight of the tumor, which covered a large part of the palpebral fissure. It was excised and the conjunctiva and skin united by sutures.

The histological examination showed that it was a typical adenoma of the type of the Meibomian or sebaceous glands of the lid border. Although it could not be definitely decided whether it had developed from the sebaceous glands of the lid border or from the Meibomian glands near their duct, the fact that the tumor did not develop in the tarsus and had a thin base at the ciliary margin, without involving the lid, corresponded more with the assumption of an adenoma of the sebaceous glands.

C. ZIMMERMANN.

LACERATION OF THE INTERNAL RECTUS. Spiro, G., Berlin. (Centralbl. f. Aug. 39, p. 31). A soldier while stooping in a dark stable to get feed ran his left eye into a wire bent like a hook, and lost consciousness. He was five days in the field hospital on account of laceration of the internal rectus, with diplopia and a diver-

gence of 50°. The eye itself was intact V=1. The finding of the torn, very much retracted muscle was difficult. It was sewed, with full recovery, and ability to serve in the war.

C. ZIMMERMANN.

ABSOLUTE GLAUCOMA IN MELANOSARCOMA OF CHORIOID AFTER INJURY BY A BULLET. Spiro, G., Berlin, (Centralbl. f. prakt. Aug., 39, p. 31), reports from the war zone the following case: A soldier, aged 34, complained, 8 days after an injury of his right eye by the indirect impact of an infantry rifle bullet, of failure of sight and excruciating pain. Most absolute glaucoma. Diagnosis: tumor of the chorioid, which met with general doubt. Enucleation. Anatomically: Melanosarcoma of the size of a cherry stone.

C. ZIMMERMANN.

BLEPHAROTOMIA EXTERNA IN CATARACT OPERATION. Axenfeld, Th. (Klin. Mon. f. Aug., 54, p. 97). In cases of very narrow palpebral fissure, especially if associated with tensity of the lids which cannot be easily drawn away from the globe, and if the timid patient inclines to pressing, Axenfeld has frequently within the last few years after insertion of Desmarres' retractors broadly severed the external eanthus and the orbicularis muscle with the scissors and immediately afterwards performed extraction. A few minutes previously novocain-suprarenin was injected from outside, deep under the skin of the external canthus. An eventual bleeding was prevented by painting the wound with perhydrol. No suture was applied, as the wound edges, covered with salve, heal very soon under the dressing. The remarkable relaxation of the lids renders the cataract operation essentially safer and easier.

Blepharotomy was also very expedient in the not rare cases in old people, in which the separation of the lids with the speculum stretches the skin of the external canthus or the skin next to it and pulls it so far in front of the plane of the corneal section that it may become impossible to carry the knife through the base of the cornea without touching the skin. This may be aggravated if the eyeball projects comparatively little from the orbit or lies abnormally deep, and mostly if combined with simultaneous relative narrow palpebral fissure.

C. ZIMMERMANN.

ON PULSATION PHENOMENA OF THE OCULAR VESSELS. Kümmell, R., (from the eyeclinic of Prof. J. N. Oeller in the University of Erlangen. Arch. f. Aug., 78, p. 336), reports on his observations of the pulsations of the intraocular vessels with the large ophthalmoscope of Gullstrand, which gives a larger magnification than the ordinary ophthalmoscopes and without reflexes. It also gives the advantage of binocular observation, so that the details, e. g., the discs, appear very plastic. K. found that, under sufficient magnifying power, the arterial pulse is almost always present in healthy individuals and that the pulsation can be traced to the finest arterial ramifications. This is the regular arterial pulse. Venous

pulse is also always visible under physiological conditions, from the finest branches on all retinal veins to the stem at the disc. The pulsation of the retinal vein at the disc, so far known as normal, is nothing else but the continuation of the pulsations observed in the other veins. The physiological venous pulse is a centripetal pulse wave. A rapid expansion, beginning postsystolically, is followed by a slower contraction, setting in presystolically.

C. ZIMMERMANN.

On the Cuthreaction of Noguchi to Lues. Wolff, L. K., and Zeeman, W. P. C., (from the eyeclinic of Prof. M. Straub in the University of Amsterdam. Klin. Mon. f. Aug., 53, p. 547), report, after a review of literature, on their experiences with Noguchi's reaction. In two not luetic patients with negative Wassermann's reaction, it was positive. The authors reached the preliminary eonclusion, that the luetic reaction deserves a place in our diagnostic armamentarium and that a positive reaction indicates lues with very great probability, but it is not yet adapted for general use, e. g., during eonsultation hours.

C. ZIMMERMANN.

Schools for Weak Sighted. Levinsohn, G. (Klin. Mon. f. Augenh., 52, p. 719). So far weak-sighted children have been sent to normal schools, where they do not get along, or to schools for the blind, where they are educated as the blind without consideration of their remaining sight. Levinsohn has repeatedly urged the foundation of schools or classes for the weak-sighted, as they exist at Strassburg and Mühlhausen which, according to the reports of Redslob and Weinberger, have proved very useful.

C. Zimmermann.

SYPHILIS IN EYE DISEASES. Hoelscher, E., (Thesis, 8 vo. 34 p. Kiel. H. Fieneke. Zeit. f. Angenh. 31, 539), collected 150 cases of luctic eye diseases, observed at the eye clinic at Kiel within the last three years: Primary affection of the conjunctiva 1; sceritis 3; parenchymatous keratitis 43; Wassermann negative in 3; iritis 5 without characteristic clinical aspect, Wassermann positive, Wassermann negative 7, but lues very probable. Affections of the retina, choroid and optic nerve 22; orbit, respectively lacrimal paths, 2; the remaining were ocular palsies and secondary ocular affections after meningitis, tabes, and paresis.

C. ZIMMERMANN.

SYPHILIS IN EYE DISEASES. Hoelscher, E., (Thesis, 8 vo. 34 pp., Kiel. H. Fiencke. Zeit. f. Augenh. 31, 539), collected I50 cases of luetic eye diseases, observed at the eye clinic at Kiel within the last 3 years: Primary affection of the conjunctiva 1; secritis 3; parenchymatous keratitis 43; Wassermann negative in 3; iritis 5 without characteristic clinical aspect, Wassermann positive, Wassermann negative 7, but lues very probable. Affections of the retina, chorioid and optic nerve 22; orbit, respectively lacrimal paths, 2; the re-

maining were ocular palsies and secondary ocular affections after meningitis, tabes, and paresis.

C. ZIMMERMANN.

GLIOMA RETINAE AND INTRAOCULAR TREATMENT WITH ROENTGEN RAYS. Axenfeld, Th., Küpferle, L., and Wiedersheim, O., (from the eye elinic of Prof. Th. Axenfeld and the medical clinic of Prof. de la Camp. Klin. Mon. f. Aug., 54, p. 61). Axcnfeld supplements his report, in Klin. Mon. f. Aug., 52, p. 426, on the Roentgen ray treatment of the second eye of a child, aged 8 months, whose right typical amaurotic cat's eye was enucleated on January 18, 1914. The ophthalmoscopic examination of the left eye in narcosis of Feb. 10, 1914, revealed two disc diameters above the optic disc a flat prominent greenish, centrally whitish nodule of three disc diameters, over which the vessels coursed. Below the maeula, which appeared greenish grey, a second tumor, eight times as large as the disc, was covered by glistening whitish masses, surrounded by a few white spots. The third, main tumor was situated in the nasal portion of the fundus, not definable in front. Nodular masses projected free into the vitreous. The treatment with filtered Roentgen rays was continued and their effect controlled by repeated ophthalmoscopic examinations in narcosis. On November 10, 1914, A. found the tumors destroyed with visible damage to the eye. With regard to seeing, the child did not show any difference from children of the same age.

A. postulates that in every unilateral glioma retinae the second eye must be earefully searched as far as the extreme periphery, if necessary in narcosis. He is convinced that bilateral glioma will be found more frequently than so far supposed (about 1/5 of all cases). The question is discussed whether some of the cerebral mestastases, from which so many children die after enueleation, are perhaps actually independent tumors and A. thinks of the possibility of multiplicity. A. agrees with the proposition of Pusey to institute Roentgen treatment after every, even the earliest, enucleation for glioma, and recommends not to treat with Roentgen rays, but to enucleate amaurotic eyes for avoiding diagnostic errors and liberating the body as soon as possible from this propagable material. Incipient glioma, however, in a seeing eye, which generally will come under medical ascertainment only in the second eye, renders the attempt of deep radiation not only justifiable but compulsory, as well as of eyes, the enucleation of which is refused, and in later stages and relapses.

Wiedersheim studied the action of filtered Roentgen rays experimentally on the eyes of rabbits, which showed not the least injury.

In the theoretical technical part Küpferle discusses the filtration of the rays, which is necessary to protect the eye from the nocuous rays and to insure the isolation of the gamma rays and the hard Roentgen rays, which exert an inhibitory and destructive effect on the tissue of the tumor.

C. ZIMMERMANN.

# THE WISCONSIN MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE STATE MEDICAL SOCIETY OF WISCONSIN

A. W. MYERS, M. D., Editor 141 Wisconsin Street, Milwaukee

J. P. McMAHON, M. D., Managing Editor 141 Wisconsin Street, Milwaukee

Publication Committee;

A. J. PATEK, M. D., Milwaukee

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SEPTEMBER, 1915

No. 4

# **EDITORIALS**

## HONOR ROLL.

ON SEPTEMBER 10TH THE FOLLOWING SOCIETIES HAD EQUALLED OR PASSED IS YOUR THEIR 1914 MEMBERSHIP. SOCIETY IN THE LIST? IF NOT-THINK

THOSE MARKED WITH A STAR HAVE MADE A GAIN THIS YEAR.

DODGE	VERNON*
WASHINGTON*	SHAWANO*
WAUKESHA*	LINCOLN
LWOI	WAUPACA*
LA FAYETTE	W00D*
COLUMBIA	BARRON P.
MANITOWOC	DUNN-PEPI
BROWN-KEWAUNEE*	RUSK*
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JUNEAU	CHIPPEWA
LA CROSSE*	DOOR

MARATHON

AUPACA\* 00D\* ARRON P. W. S. B. UNN-PEPIN\* USK\*  $\Lambda NGL\Lambda DE^*$ RICE-TAYLOR\* HIPPEWA OOR TREMPEALEAU J. B.\* EAU CLAIRE MONROE

YOU HAVE BUT A FEW DAYS TO HELP PUT YOUR SOCIETY IN THE 100% CLUB BEFORE THE STATE MEETING.

# NOTICE TO DELINQUENTS.

IT IS CLEARLY YOUR DUTY TO PAY YOUR DUES BEFORE THE STATE MEET-ING. IT WILL BE NECESSARY TO DROP YOUR NAME FROM THE ROLL OF THE

SOCIETY OCTOBER 1ST. THIS WILL AU-TOMATICALLY DISCONTINUE JOURNAL AND YOU WILL NOT BE ELIGI-BLE TO REGISTER AT THE STATE MEET-ING. WE MAKE THIS FINAL APPEAL TO YOU.

ANNOUNCEMENT AND PROGRAM OF THE 69TH ANNUAL MEETING OF THE STATE MEDICAL SOCIETY OF WISCONSIN, MILWAUKEE, OCTOBER 6-8, 1915.

The annual meeting of the State Medical Society of Wisconsin will be held in Milwaukee October 6, 7 and 8, and promises in every way to eclipse any meeting we have ever held. Milwaukee is noted not only as Wisconsin's metropolis but is known throughout the country as the best convention city in the west. The arrangement committee has been extremely fortunate in securing the beautiful new million-dollar Hotel Wisconsin to house every activity of the society. The management assures us that the hotel is ours for the week. The general sessions will be held in the Gold Room on the first floor. The House of Delegates will meet in the Gold Room the first night and after that in the Club Room. The exhibits which promise to be the most extensive we have ever had will be in the Colonial Room just off the the lobby on the main floor. For the smoker the Medical Society of Milwaukee County have secured the Badger Room for the evening, Milwaukee's newest and finest cafe. The arrangements for the 1915 meeting have never been equaled.

The program which follows is one to tempt any man away from the year's grind. No progressive physician can afford to miss it. The opportunity to hear such men as Professors Lewellys F. Barker and Joseph Colt Bloodgood of Baltimore, John B. Murphy of Chicago, Fred T. Murphy of St. Louis and H. Gideon Wells of Chicago, comes but seldom at one meeting; and the program by our own Wisconsin men is well worth the time and expense.

Some change has been made in the usual arrangement for social entertainment. There is no set program for Wednesday evening. This is in accordance with the expressed wishes of many of the members, who wish one evening off to attend theaters, visit with friends or relatives, or hold reunions. The smoker will be held at the Badger Room, Hotel Wisconsin, immediately after the public meeting (which will adjourn early) Thursday evening. This is a complimentary smoker given by the Medical Society of Milwaukee County and all members are invited but must wear the official badge. The chairman of the committee writes "Some surprises in the entertainment line are promised—BE THERE!" Automobile rides, sight-seeing tours, visits to the Hospitals, etc., are being planned,—and don't forget your ladies.

The second annual meeting of the Wisconsin Eye, Ear, Nose and Throat Specialists, to be held Oct. 8th and 9th is an added inducement to come, and the sixth annual meeting of the Women's Medical Society of Wisconsin will convene on October 4th and 5th. The programs of these meetings are given in full in this number of the Journal and will repay careful consideration. The papers to be presented are of unusual interest and timeliness.

# PROGRAM 69TH ANNUAL MEETING, WED-NESDAY, OCTOBER 6TH.

# MEMORANDA.

- The House of Delegates will meet in the Gold Room, Hotel Wisconsin, Tuesday Evening. Oct. 5th, at 8 P. M. Please see to it that your delegate is present.
- 2. The first general session will be held in the Gold Room, Hotel Wisconsin, October 6th, at 11:30 A.M.
- A complimentary Smoker will be given visiting members by the Milwaukee County Medical Society in the Badger Room, Hotel Wisconsin. Badges necessary for admittance. Thursday evening at 9:15 following public meeting.
- 4. The County Secretaries will hold their annual "Ginger

- Tea" luncheon in the Badger Room Thursday noon immediately after the Address in Medicine. County secretaries and state officers invited. Dr. Frederick R. Green, Secretary of the A. M. A. Council on Health and Public Instruction will talk on "The Duty of the Organized Medical Profession in Public Education."
- 5. The registration office adjoins the Gold Room where the general sessions will be held. Report there on your arrival and receive your badge. This is the only record of attendance and the badge is necessary for admittance to the smoker.
- 6. Mail may be addressed in care of the Hotel Wisconsin and telephone calls and telegrams will be promptly attended to by the management. Announcement of all regular and special meetings will be posted in the lobby.
- 7. A reminder that if you have not paid your dues it is elearly your duty to do so now. The names of delinquents will be dropped from the roll of the society and mailing list of the Journal Oct. 1st.

# MORNING SESSION, 11:30 A. M.

Call to order by the President, Theodore J. Redelings, Marinette.

Invocation, Rev. Walter F. Greenman.

Address of Welcome, Dr. G. A. Bading, Mayor of Milwaukee.

Response by the Vice-President, Spencer D. Beebe, Sparta.

Report of Committee on Arrangements, R. W. Blumenthal, Milwaukee.

Report of Program Committee, Chester M. Echols, Milwaukee.

#### AFTERNOON SESSION 2 P. M.

- 1. Annual Address of the President, Theodore J. Redelings, Marinette.
- 2. Comments on Recent Medical Legislation, Philip F. Rogers, Milwaukee.

Discussion opened by John J. McGovern and John M. Beffel, Milwaukee.

- 3. Symposium on Accident Surgery and Workmen's Compensation—
- a. The Indemnity Companies' Point of View, A. B. Rosenberry, Wausau.
- b. Relation of the Medical Profession to Workmen's Compensation, Hon. Chas. H. Crownhart, Retiring Chairman Wisconsin Industrial Commission.

c. Hernia and Orchitis in Relation to Accident and Compensation, A. H. Levings, Milwaukee.

Discussion opened by Edward Evans, La Crosse; Chas. Lemon, Milwaukee; W. F. Zierath, Sheboygan and R. H. Jackson, Madison.

4. Some Acute Abdominal Emergencies, D. R. Connell, Beloit.

Discussion opened by L. F. Jermain, Milwaukee; J. P. Connell, Fond du Lac; and F. W. Nuzum, Janesville.

# THURSDAY, OCTOBER 7TH.

MORNING SESSION, 9:00 A. M.

5. Non-Diabetic Acetonaemia, M. R. Wilkinson, Oconomowoc.

Discussion opened by F. J. Hodgson, Waukesha; and H. A. Peters, Oconomowoc.

6. Focal Infections and Their Relation to Diabetes, H. P. Greeley, Waukcsha.

Discussion opened by F. C. Christensen, Racine; and J. D. Madison, Milwaukee.

7. Diagnostic Value of the Systolic Blood Pressure, J. W. Fisher, Med. Director Northwestern Mutual Life Ins. Co., Milwaukee.

Discussion opened by W. H. Washburn and L. M. Warfield, Milwaukee.

8. The Schick Reaction in the Milwaukee Isolation Hospital Work— $\Lambda$  Preliminary Report, Leopold Schiller, Milwaukee.

Discussion opened by E. V. Brumbaugh and G. H. Fellman, Milwaukce.

9. Wassermann Tests and Cerebro-spinal Fluid Examinations, W. F. Lorenz, Director Wisconsin Psychiatric Institute, Mendota.

Discussion opened by Edw. Evans, La Crosse and F. Gregory Connell, Oshkosh.

10. Address in Medicine—Disorders of the Internal Secretions, Prof. Lewellys F. Barker, Baltimore,

#### AFTERNOON SESSION 2 P. M.

- 11. Symposium on Cancer.
- a. Cancer of the Lip, V. F. Marshall, Appleton.
- b. Pre-Cancer Lesions, Wm. E. Ground, Superior.
  - c. Experimental Investigations on Cancer

(illustrated by lantern slides), H. Gideon Wells, University of Chicago.

Discussion opened by Joseph C. Bloodgood, Baltimore; W. C. F. Witte, Milwaukee; C. J. Combs, Oshkosh and Horace M. Brown, Milwaukee.

- 12. Address in Surgery—The Influence of Certain Foreign Bodies Upon the Process of Repair in Fractures of the Long Bones, Prof. Fred T. Murphy, Washington University, St. Louis.
- 13. Gastric and Duedenal Ulcer in the New Born, T. W. Nuzum, Janesville.

Discussion opened by E. E. Loomis, Janesville and A. W. Myers, Milwaukee.

# THURSDAY EVENING 7:45 TO 9:15 P. M. (Preceding the Smoker.)

PUBLIC MEETING TO DISCUSS THE CANCER PROBLEM.

Addresses by Prof. Joseph Colt Bloodgood, Baltimore, Prof. John B. Murphy, Chicago, and others.

New Lecture Hall, Public Museum, 8th St. Entrance.

# FRIDAY, OCTOBER 8TH.

MORNING SESSION 9 A. M.

14. Constructive Legislation and Feeble-Mindedness, Mary E. Pogue, Lake Geneva.

Discussion opened by W. F. Lorenz, Mendota and F. C. Studley, Milwaukee.

15. The Harrison Law and Its Relation to Drug Habitues, Adin Sherman, Supt. Northern Hospital for Insane, Winnebago.

Discussion opened by Neil Andrews, Oshkosh and Wm. F. Becker, Milwaukee.

16. A Question of Diagnosis between Paresis and Manic-depressive Insanity (expansive form) in a Syphilitic Subject, Richard Dewey, Wauwatosa.

Discussion opened by Gilbert E. Seaman, Milwaukee and Wm. F. Becker, Milwaukee.

17. Analgesia and Semi-Narcosis During Childbirth, Chas. A. Wright, Delavan.

Discussion opened by G. A. Hipke and Walter G. Darling, Milwaukee.

18. Bifurcation of the Transverse Process of the Fifth Lumbar Vertebra, with Report of a Case, Wilson Cunningham, Platteville.

Discussion opened by C. R. Bardeen, Madison and Philip F. Rogers, Milwaukce.

PROGRAM OF THE SIXTH ANNUAL MEET-ING OF THE WOMEN'S MEDICAL SOCIETY, OCTOBER 4th AND 5th, MIL-WAUKEE.

HEADQUARTERS, THE REPUBLICAN HOUSE.

#### MONDAY.

#### MORNING SESSION.

10:00 A. M. Call to Order—Business Meeting—President's Address.

12:30 P. M. Luncheon at the Republican House given by the Arrangement Committee.

#### AFTERNOON SESSION.

1:30 P. M. Call to order at 1:30 P. M.

1:30 P. M. Paper—The Most Common Portal of Infection for Acute Diseases—Dr. Julia Riddle. Discussion opened by Dr. Anne Marie Peterson.

2:00 P. M. Paper—The New Movement in Obstetries—Dr. Bertha Van Hoosen.

Discussion opened by Dr. G. A. Hipke.

2:40 P. M. Paper—Hydrotherapy in the Treatment of Nervous and Mental Diseases—Dr. Belle P. Nair.

Discussion opened by Dr. Helen A. Binnie.

3:00 P. M. Paper—The Health of Children—Dr. Ida L. Sehell.

3:20 P. M. Paper—Conservation of the Eye— Dr. Mary M. Hopkins.

3:40 P. M. Paper—The Wassermann Reaction—Dr. Helen A. Binnie.

Discussion opened by Dr. C. A. Frost.

4:00 P. M. Paper—The Relation of Obesity to Health—Dr. Luella E. Axtell.

Discussion opened by Dr. Louise Seeber.

#### EVENING.

6:30 P. M. Banquet at Republican House, Toastmistress, Dr. Irene C. Tomkiewicz.

#### TUESDAY.

MORNING SESSION.

9:00 A. M. Call to Order—Business Meeting.

10:00 A. M. Clinie at the Maternity Hospital, Dr. Bertha Van Hoosen.

1:30 P. M. Luneheon at the Republican House, Hostess, The President.

#### AFTERNOON SESSION.

Auto ride about City visiting the Hospitals.

PROGRAM OF THE SECOND ANNUAL STATE MEETING OF THE WISCONSIN EYE, EAR, NOSE AND THROAT SPECIALISTS.

UNDER THE AUSPICES OF THE MILWAUKEE OTO-OPHTHALMIC SOCIETY.

At the Pfister Hotel—Red Room—Milwaukee, Wis., October 8th and 9th, 1915.

# FRIDAY, OCTOBER STH.

MORNING SESSION, 9 A. M.

- 1. Annual Address of the President, Dr. Nelson M. Black, Milwaukee.
- 2. Corrective Surgery of the Anterior Nares, Dr. Wm. E. Grove, Milwaukee.
- 3. Diseases of the Eye Associated with Diseases of the Nose and Mouth (illustrated). Dr. James Bordley, Jr., Baltimore.
  - 4. Hay Fever, Dr. Franz Pfister, Milwaukee.
- 5. A Family with Interesting Eyes. Dr. Wilbur N. Linn, Oshkosh, Wis.

## AFTERNOON SESSION, 1:30 P. M.

- 6. Advances in Otologic Diagnosis, Dr. S. J. Kopetzky, New York.
- 7. An unusual case of Lateral Sinus Thrombosis, Dr. Geo. F. Zann, Milwankee.
- 8. The influence of manometric variations on the middle ear, Dr. Henry B. Hitz, Milwankee.
- 9. Epithelioma of the external auditory meatus, Dr. Samuel G. Higgins, Milwaukee.
- 10. Ear Affections and Diabetes, Dr. Chas. Zimmermann, Milwankee.

wankee.

SATURDAY, OCTOBER 9TH.

MORNING SESSION, 8 A. M.

The Clinical and Operative Program will be announced later.

TRANSACTIONS
OF THE

SIXTY-EIGHTH ANNUAL MEETING OF THE

# STATE MEDICAL SOCIETY OF WISCONSIN

AT OSHKOSH, OCT. 7, 8 AND 9, 1914 OFFICERS:

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DLLEGATE TO COUNCIL ON MEDICAL EDUCATION  $\mathbf{A},\ \mathbf{M},\ \mathbf{A},$ 

A. J. PATEK, Milwaukee.

# PROCEEDINGS OF THE HOUSE OF DELE-GATES OF THE STATE MEDICAL SOCIETY OF WISCONSIN.

SINTY-EIGHTH ANNUAL MEETING, OSHKOSH,

Oct. 6, 7, 8 and 9, 1914.

Session October 6th, 1914, 8 P. M. Meeting called to order by the President, Dr. Charles S. Sheldon, of Madison.

PRESIDENT: It is unnecessary to say that it gives me a great deal of pleasure to meet the House of Delegates on this occasion.

I shall not detain you with any lengthy remarks, and we will now listen to the roll call by the secretary.

Roll call of delegates by the Secretary.

The report of the Committee on Publication was presented by Dr. A. J. Patek, Chairman, as follows:

To the House of Delegates of the State Medical Society of Wisconsin:

Bestowing praise when and where due, is a tribute that needs no apology. Those of us who have watched the State Society's publication since the day it entered

the arena of medical publications, and have followed it through the various chapters of its eareer, eannot but feel proud of the success achieved. There were difficulties, but they were gradually overcome. The wide-spread change of conscience as to medical advertising give us much concern, because it seemed impossible to reconcile—financially—adherence to the standards imposed upon us, with our own efforts to conduct the Journal without increasing its cost to the Society. But even this reform was carvied, and our pages are purged of any suggestion of submission to or dictation by commercialism. The alteration in the form of the Journal proved a welcome and desirable change, and carried to completion our ideas as to the permanent character the Journal was to take.

Few comments of this last year's work are needed. The reading matter reflects in the main the work of the State Society's Annual Meeting, and must to this extent be judged by the program of this Society. In addition there have appeared other excellent contributions, county society reports, and communications.

It gives me pleasure to call attention to the efficient conduct of the JOURNAL by the editor, Dr. Myers. His editorials have been timely, spirited and able. No less praise is due our managing editor, Dr. McMahon, to whose sole efforts must be attributed the financial suceess of our publication.

A comparison of the cost of the JOURNAL during the years  $1910 \cdot 1914$  may be noted here:

Average cost of single copy, Jan. 1, 1910, to June 1, 1910 (5 months)—6.1.2 cents.

Average cost of single copy, June 1, 1910, to June 1, 1911 (12 months)—3 1/3 cents.

Average cost of single copy, June 1, 1911, to May 1, 1912 (11 months) -4 1 $^{6}$  eents,

Average cost of single copy. May 1, 1912, to October 1, 1913 (17 months) -5 1/2 cents.

Average cost of single copy, October 1, 1913, to October 1, 1914 (12 months) + 6.6.7 cents.

Average cost of single copy prior to Jan. 1, 1910-10 cents.

A complete audit of the books, dating from the time of the transfer of the Journal to the State Medical Society, January 1, 1910 to October 1, 1913, was made by Reilly, Everts, Penner Co., public accountants and auditors, 1115 Wells Bldg., Milwankee, since the last Annual Report was presented to the Society. Their statement certifies that all receipts have been accounted for, and all cash deposited, and that all disbursements were supported by voucher checks, properly recorded, and that the Journal's accounts were found correctly kept and in balance,

It will be recalled that the report made to the 1912 session made mention of the proposition to organize an advertising soliciting bureau for all of the state-owned medical journals. A meeting to organize such a bureau was held at the American Medical Association offices, in Chicago, February 26, 1912, and was attended by the Managirg Editor of your Journal. A plan was adopted and an advertising soliciting representative appointed, but neither the plan nor the representative was successful.

Another plan was devised and it, too, proved unsuccessful.

The House of Delegates of the American Medical Association, actuated by a desire to assist the several state-owned medical journals, passed a resolution during the 1913 session, empowering the President to appoint a committee of three to proceed with the establishment of a co-operative medical advertising bureau for state-owned journals that comply with the rules of the Council on Pharmacy and Chemistry in their advertising copies. The Board of Trustees appropriated funds to finance this bureau on November 7, 1913. A representative was employed and the bureau has been active since December 1, 1913. The total amount of contracts secured for your publication since the bureau was established amounts to \$571.00, the net profit to the Journal upon which amounts to \$399.70.

In order to hold the advertising clients thus far seenred and to induce other firms to occupy advertising space, it is absolutely necessary that each member of the Society patronize the advertisers who have desirable wares when in need of their goods, and that due credit be given the JOURNAL when communicating with such firms

The earnings and collections, October 1, 1912, to October 1, 1913, and from October 1, 1913, to October 1, 1914, are as follows.

#### EARNINGS.

October 1, 1912, to October 1, 1913....\$3,467.93 October 1, 1913, to October 1, 1914.... 3.247.03

#### COLLECTIONS.

October 1, 1912, to October 1, 1913....\$3,073.67 October 1, 1913, to October 1, 1914.... 2,810.20

The financial report is appended and is submitted to you for your consideration.

ARTHUR J. PATEK, Chairman.

October 6, 1914.

#### THE WISCONSIN MEDICAL JOURNAL.

#### FINANCIAL STATEMENT.

October 1, 1913, to October 1, 1914.

Cash balance October 1, 1913		\$ 169.74	
State Medical Society	\$1712.25		
Advertising	2781.70		
Subscription	28.50		
Halftones, zinc etchings and excess payments	83.81		
		\$4606.26	
			\$4776.00
Disbursements:			
Equipment			
Printing	\$2397.48		
Salaries	1222.00		
Commissions for securing advertising contracts	549.73		
Postage	200.00		
Office supplies and expenses	27.90		
Miscellaneous general expenses	78.78		
Halftones, zinc etchings, excess payments and discount	90.71		
		\$4566.60	
			\$4566.60
Balance on Hand October 1, 1914			\$ 209,40
Figure on Hand October 1, 1917			. =00.10

#### ASSETS.

Office equipment	\$ 158.63
Cash in bank	209.40
Accounts receivable	1963.39
Merehandise	19.12

#### LIABILITIES.

Aecounts payable	\$ 466.52 126.75		
		\$ 593.27	
Assets exceed liabilities			\$1757.27
THE WISCONSIN MEDICAL JOURNAL.			
PUBLISHING COST STATEMENT.			
October 1, 1913, to October 1, 1914.			
Income from publishing:			
Advertising, gross charges	\$3218.48 156.25		
Net income from advertising		\$3062.23 28.55	
Total income from operation			\$3090.78
Publishing expenses:			
Printing Salaries Commissions for securing advertising contracts Postage Cuts, drawings, etc. Office supplies and expenses Miscellaneous general expenses.	\$2237.26 1302.00 662.52 201.83 2.50 27.90 87.68		
: Total publishing expenses		\$4521.69	
Expenses execed income  Bad debt loss		1430.91 16.90	
Net eost of publishing the JOURNAL			\$1447.81 21,068

The deficit of \$1447.81 represents the cost to The State Medical Society of circulating 21,068 copies of the JOURNAL, or about 66/7e a copy.

PRESIDENT: You have listened to the report of the Committee on Publication. Are there any inquiries or remarks?

Dr. McMahon is here now and will be willing to inform you on any point that requires further explanation.

We should also be glad to hear the report of the Committee on Public Policy and Legislation, of which Dr. McMahon is Chairman, if he is ready to report.

The report of the Committee on Public Policy and Legislation was presented by Dr. J. P. Me Mahon, Chairman, as follows:

Dr. J. P. McMahon, Milwaukee: This report

was written a few days ago and a copy of it sent to Dr. Sullivan of Madison with the request that he read it over and forward to me, at Milwaukee, any suggestion he may have to offer with reference to it. Dr. Sullivan was also asked to submit the report to Dr. Bowman, the other member of the Committee, and ask, Dr. Bowman to forward such suggestions as he may have to offer.

Dr. Sheldon informs me that Dr. Sullivan and Dr. Bowman prepared a supplementary report, which they forwarded by him, but he left it in his room at Dr. Steel's residence. The supplementary report will be presented when it reaches the hall. Pending its arrival, I shall read the report compiled by your chairman.

REPORT OF COMMITTEE ON PUBLIC POLICY AND LEGISLATION.

To the House of Delegates of The State Medical Society of Wisconsin:

The principal matters which occupied the attention of your committee since the last annual session were the Harrison National Anti-Narcotic Bill, H. R., 6282, and Section 2339M of the Wisconsin Statutes relating to marriage and venereal diseases, popularly known as the Eugenic Marriage Law.

During the last session of congress there was introduced a bill known as the Harrison National Anti-Narcotic Bill. The purposes of the bill were to keep a record of all narcotics and their alkaloids from the date of their reaching the United States to the time of their ultimate consumption on record blanks furnished by the Internal Revenue Department. These proposed blanks provide for a detailed account of the several drugs' passage through the hands of the importer, the manufacturer of pharmaceuticals, the drug jobber, the drug wholesaler and the drug retailer. All of the above mentioned provisions are, of course, in keeping with public interest and have the endorsement of the organized medical profession, the American Association of Pharmaceutical Chemists, and The American Pharmaceutical Association.

The bill passed the house.

During the present session of congress, Senator Nelson, of Minnesota, proposed an amendment which, if chacted, would prevent physicians, dentists or veterinary surgeons from dispensing or distributing any of the so-called narcotics or their derivatives. The amendment requires physicians, dentists or veterinary surgeons administering any of such drugs to keep a list of the names and addresses of all persons to whom such drugs were administered, the date thereof, and it further requires that such records shall be preserved for a period of two years, in such a way as to be readily accessible to the inspection of federal internal revenue officers, state boards of pharmacy and health, municipal police officers, etc.

It is readily seen that under the provisions of the amendment physicians would be permitted to administer narcotics only in person. It would prevent them from leaving medicine for the relief of pain, of cough. of asthma, of neuralgia, of shock, or of any other serious medical or surgical condition requiring repeated doses of narcotics. Neither would a physician be permitted to transmit these drugs to a patient by means of a messenger without writing a prescription and having the prescription filled by a registered druggist. In short, the amendment would legalize the physician's use of the hypodermic syringe, but would prevent him from leaving anodynes or stimulants for administration by a nurse or by members of the family, hypodermically or per os. Comment upon the lack of necessity for and the unreasonableness of requiring members of the professison to engage in the maze of clerical detail is, of course, unnecessary here.

The amendment is supposed to have been inspired by a

certain National Association of Retail Druggists, which organization is said to be ostensibly furthering federal and state legislation for the supervision of the manufacture and distribution of narcotic drugs, but, in reality, promoting legislation which shall require that all medical preparations taken upon the advice of medical men shall be dispensed on prescription only, thereby doing away entirely with the so-ealled dispensing doctor.

Curiously enough, these bills are entirely devoid of provisions for the supervision and control of the manufacture and distribution of proprietary and patent medicines, the majority of which contain small quantities of opium, morphine, heroin, codein, belladonna, atropine, cocaine, etc.

Your committee forwarded a number of night letters and petitions, on behalf of this Society, to the members of congress from Wisconsin and to the members of the committees of both houses which had this bill under consideration. The forwarding of these letters entailed eonsiderable expense, which was borne by Kremers-Urban Co. of Milwaukee, members of The American Association of Pharmaceutical Chemists, which association has promoted a number of worthy measures before the national congress and opposed all unworthy measures.

The objectionable Nelson amendment is still pending and each member of the Society should forward a protest to his representative in congress and to both United States senators.

For further reference to national legislation, we would refer the members to the report of the Council on Health and Public Instruction, made during the last session, to the A. M. A., which report speaks well for the nature and extent of the efforts which the medical profession is putting forth to prevent disease and accidents and to prolong life. The Council has arranged for a survey of the present and future activities and functions of the medical profession to determine the mission of the profession in its public relations. The survey will include an inventory of all public health activities of the federal government in all of its departments and an inventory of all state public healthy activities and an inventory of all voluntary public health organizations within each state.

The Council continues at the same time a campaign of education of the public by every possible means in order that the public may understand the enormous advances in scientific and medical knowledge made during the last generation and the possibility of utilizing such knowledge in the prevention of disease, the reduction of death rate and the prolongation of human life. It is hoped that possessing the public with such knowledge will render the laws enacted more readily enforcible and make easier the passage of additional legislation for the conservation of life which will be commensurate with advancing information on this subject.

The policy of the Council on Health and Public Instruction of the A. M. A., with reference to the creation of a national department of health as advanced by the Owen Bill, during the last year and at the present time, is one of patient though expectant inactivity. This policy was adopted as a result of a request of President Wilson that measures for the improvement of health

conditions be postponed until other pressing matters of legislation had been disposed of, thereby making it possible for both himself and congress to devote such time and consideration to the problems as their nature merits. The profession is committed to the principles to create a national department of health as embodied in the Owen bill.

The report of the Council on Health and Public Instruction makes mention of the efforts being put forth by the women members of the profession in educating mothers and women in general and eites the fact that the efforts are bearing fruit in bringing about early diagnoses of disease peculiar to women and disseminating information with reference to the proper care of infants and children. This Society should extend greetings to The Wisconsin Medical Women's Society, which has just concluded a program devoted principally to the questions of maternal and infant physical welfare.

The provisions of the bill relating to marriage and venereal diseases are known to all of you. It probably was the subject of discussion by each component society immediately after its passage. The Committee on Public Policy and Legislation of The Medical Society of Milwaukee County secured an interpretation of the act from the Attorney General. The interpretation, accompanied by certain recommendations from the committee, was printed in the January issue of The Wisconsin Medical JOURNAL, page 267. Subsequent to the date of the Attorney General's opinion, the constitutionality of the law was tried before Judge Franz Eschweiler of one of the Circuit Courts of Milwaukee County, where it was declared unconstitutional. An appeal was taken and the Supreme Court reversed the decision of the trial court in a divided opinion, so that the act is now in full force. Its workability and its practicability are well known to all of you.

The profession is divided into four eamps with reference to carrying out the provisions of the law: those who feel that they can conscientiously issue certificates without the application of the recognized laboratory test and are doing so; those who cannot conscientiously sign certificates without employing those tests and who, of course, refuse to issue them; those who employ such tests provided the applicant is willing to submit to and pay for them, and who issue or withhold certificates, depending upon the findings of such laboratory examinations; and those who exercise their privilege of refusing to issue certificates under any and all creumstances.

We regret to have to state that we believe the majority of the profession belong to the first camp, whereas we believe that all should belong to the third camp, membership in which shows a desire to protect unsuspecting brides and their posterity, and at the same time manifest due respect for the Wisconsin statutes. The act should be repealed in its entirety or radically amended.

Among other questions which should be taken up during the incoming session of the legislature may be mentioned a few minor amendments to The State Board of Health law and the Anti-fee-splitting act, a rewriting of the Medical Practice Act, making it mandatory for any person desiring to engage in any form of practice whatsoever for the diagnosis, the treatment, the relief

or the care of physical or mental diseases or infirmities to apply to the State Board of Medical Examiners for a license so to do; the promotion of a new bill providing for the commitment of the insane; and the introduction of a new bill covering the matter of medical expert testimony. Bills designed to correct the professional blemishes resulting from past practice in the matter of expert testimony will be introduced to the legislature of a number of other states during the coming year.

The American Medical Association has organized a Medical Legal Bureau to prepare material on the different subjects under discussion before the various state legislatures. Any member who may be entertaining the idea of advancing any form of health legislation should avail himself of the services of this Bureau, and when the bill is ready for presentation it should be forwarded to the Committee on Public Policy and Legislation, so as to avoid conflicts, duplication of energy and unnecessary expense.

All forms of special legislation for so-ealled optometrists, chiropractors, drugless practitioners, etc., etc., should be strenuously opposed. Their defeat can be successfully accomplished if each member of the Society does her or his share in co-operating with those having immediate charge of the several matters which will be presented. Failure to render such co-operation means that legislation designed to protect public health will be shaped by a lobby of irregular medical sects and manufacturers or dealers in impure foods and drugs. Which brand of legislation will you have?

Respectfully submitted,

J. P. McMahon, Chairman.

President: The supplementary report of Dr. Sullivan will be read to the meeting a little later.

Are there any remarks on this report of the Committee? If not, what action will you take in regard to it.  $\Lambda$  motion is in order.

Dr. A. H. Levings, Milwaukee: I move that it be received and placed on file.

DR. McMahon: I should like to have it simply received and placed on file until we have heard from the other members of the Committee.

Motion put and carried unanimously.

PRESIDENT: We failed to take any action on the report of the Committee on Publication, and I will listen to a motion disposing of that report, which has just been read by Dr. Patek.

DR. L. M. WARFIELD, Milwaukee: I move you that the report be accepted and filed.

Motion put and unanimously carried.

PRESIDENT: The next business is the report of the Committee on Prevention of Tuberculosis.

# REPORT OF COMMITTEE ON PREVENTION OF TUBERCULOSIS.

Your Committee begs to submit the following report concerning the work being done for the prevention of tuberenlosis in the state.

The legislature of 1913 provided for the establishment of a tuberculosis camp on state lands somewhere in the northern part of the state. The selection of site, management and development of this camp is under the State Board of Control.

A point of land extending into Tomahawk Lake, consisting of 64.6 acres, in Oneida County, has been selected for this eamp. Near this institution are open tracts of land, seven forties, consisting of two hundred and eighty acres. This land is adapted for agricultural purposes.

The appropriation for the tuberculosis eamp is \$10,000 a year for buildings and maintenance.

Individuals convalescent from tuberculosis, as well as those threatened with tuberculosis, are admitted to this camp, upon the payment of \$3.50 per week.

By the first of January, 1915, it is expected that the administration building and one cottage will be completed, making a capacity for forty people.

One of the State Nurseries is located about one-half mile from this tuberculosis camp. Inmates of this institution will be permitted to do a certain amount of work in this nursery at such times as their ability will permit. Tuberculosis patients convalescent from state institutions as well as county institutions will find a most valuable field for recuperation on the Oneida County grounds.

The female insane tubercular patients in the various county institutions of the state are now segregated in the La Crosse County Asylum. The male insane tubercular patients are now segregated in the Douglas County institution. This institution has a capacity of twenty-four, the present population being twenty-two inmates. A ward has been set aside in each hospital for the insane for the tuberculosis patients. The tubercular insane at Waupun all have proper care,

There are six county tuberculosis sanatoria for tuberculosis patients completed; two more in the process of construction, with a possibility of two more being provided for by the county board of supervisors.

The county institutions outside of Milwaukee County are capable of housing two hundred and forty patients. The Milwaukee County institution, about to be completed, will have a capacity of three hundred patients.

The field is yet fertile for the hearty encouragement of a few more county sanatoria. Care should be taken in the selection of the counties where these sanatoria are to be established in order to obtain sufficient patients to fill the institutions. This should be earefully considered in order to prevent any reaction from the movement so strongly rooted.

Two or more counties in the more sparsely settled districts of the state should consider the advisability of the establishment of samatoria for such adjoining counties.

The State Board of Health has established a Bureau of Contagious Diseases with special reference to the reporting and prevention of tuberculosis.

The Deputy State Health Officers give special attention to the tuberenlosis problem and are co-operating with the physicians of the state to bring about more careful consideration of tubereulosis cases.

The State Board of Health has planned for a sanitary survey of a certain number of counties each year, which will assist materially in establishing definite sources of causation of this disease.

The Wisconsin Anti-Tubereulosis Association is continuing its efficient work in its various fields which are familiar to you all.

The agencies of education are of prime importance to a proper understanding of this disease and its prevention,

The Committee asks for more hearty co-operation of the physicians and people of the state in the reporting of the tuberculosis cases to the local health authorities, and greater efficiency in making earlier diagnosis and eareful advice to the patients, not only for their own protection but for the protection of the general public.

The visiting nurses are doing commendable work, and their employment should be strongly encouraged in the unnicipalities throughout the state.

The following is a list of the tuberculosis sanatoria in the state:

State Sanatorium at Wales; River Pines Sanatorium at Stevens Point; Milwaukee County Sanatorium; Blue Mound Sanatorium; Greenfield Sanatorium; Sunny Rest. at Raeine; Maple Crest, at Manitowoc; Mt. Washington, at Eau Claire; Winnebago County; Brown County; Douglas County.

Respectfully submitted,

C. A. HARPER, T. H. HAY, G. E. SEAMAN.

PRESIDENT: The next business is the report of the Committee on Education, Dr. Edward Evans, Chairman.

Dr. Edward Evans, La Crosse: Inasmuch as the program to-morrow has two papers on Medical Education, and on Friday morning there are also two papers dealing with education or legislation, besides remarks by the President of the A. M. A., as well as the secretary of the same, I think it is not necessary to attempt to make any report now.

PRESIDENT: The next business is the report of the Committee on Necrology.

# REPORT OF COMMITTEE ON NECROLOGY.

To the House of Delegates of the State Medical Society of Wisconsin:

Dr. Osear Chrysler, Chief Surgeon National Soldiers' Home, was instantly killed by the explosion of a disinfeeting apparatus on October 29, 1913. Graduate Detroit College of Medicine, 1892. Member Milwaukee County and the State Medical Societies.

Dr. W. A. Jones, Oeonomowoc, died on November 1, 1913, of apoplexy following an operation for appendicitis. Born at Lamartine, Fond du Lae County, in 1858. Graduate Hahnemann Medical College, Member Waukesha County and the State Medical Societies.

Dr. G. W. Jenkins, Kilbourn, died on November 6, 1913, aged 89 years. Born at Duanesburg, N. Y., September 19, 1824. Graduate of the Medical Department Columbia College, New York, in 1851. Located at Kilbourn in 1862 and retired from active practice in 1899. Member Columbia County and the State Medical Societies.

Dr. James V. Canavan, mayor of Appleton, died on December 4, 1913, after a lingering illness covering a period of two years. Born near Appleton January 22, 1800. Graduate Rush Medical College, 1894. Member Ontagamic County and the State Medical Societies.

Dr. Knut Storlie, Coon Valley, died on December 29, 1913, aged 45 years. Graduate Bennett Medical College, 1896. Member Vernon County and the State Medical Societies.

Dr. Edward W. Malone, Waukesha, died on January 10, 1914, of apoplexy. Born at Rochester, Racine County, November 22, 1855. Graduate of the University of Illinois College of Medicine, 1885. Member of Waukesha County and the State Medical Societies.

Dr. Peter McKittrick, Eau Claire, died on December 18, 1913. Born on January 7, 1866, near Lanark, Ontario, Canada. Graduate Rush Medical College, 1889. Member Eau Claire County and the State Medical Societies.

Dr. Carl Reinhard, Milwaukee, died on January 5, 1914, aged 66 years. Born July 1, 1847, Town of Melsungen, Germany. Received his degree at the University of Marburg, served in the Franco-Prussian War as a surgeon, came to America in 1876, and practiced at Milwaukee until five years ago, when forced to retire because of ill health. Member Milwaukee County and the State Medical Societies.

Dr. Jacob Simonson, Tomah, died February 6, 1914. A native of Switzerland, born at Geneva May 3, 1853. Educated at Marbarg Polytechnic School of Science and Mathematics. Came to America at the age of 28 and received his medical education at the Toledo Medical College, Toledo, Ohio. Established the Tomah Hospital and conducted it up to the time of his death. Member Monree ounty and the State Medical Society.

Dr. E. R. Holliday, Ellsworth, died on February 17. 1914, aged 49 years, after an illness of several years' duration. Born on a farm in Calumet County, May 21, 1865. Graduate College of Physicians and Surgeons. Chicago. 1893. Member Pierce County and the State Medical Society.

Dr. George W. Dodge, Menasha, died in March, 1914, of pneumonia, aged 73 years. He was a graduate of the Northwestern University Medical School, class of 1873. He was a veteran of the Civil War.

Dr. C. E. Thayer, Markesan, died in February, 1914. of heart disease, aged 55 years. Born in Brandon. Fond dn Lac Connty. Graduate of the Northwestern University. School of Medicine, 1883. Member Green Lake-Waushara County Medical Society.

Dr. Charles R. Krentzer, Milwaukee, aged 42 years,

died in February, 1914. Born at Grafton, Wiseonsin, January 28, 1872. Graduate of the University of Michigan, 1897. Member Milwaukee County.

Dr. Martin Hagen, Viroqua, was instantly killed on March 23, 1914, when a runaway team crashed into his horse. He was 41 years old. A native of Norway, he came to America at the age of 17 and first located at Cashton. Graduate Chicago College of Medicine and Surgery. Member Vernon County Medical Society.

Dr. William E. Scollard, Milwaukee, died on April 21, 1914, aged 63 years. Born in Wisconsin, graduate Rush Medical College, 1882. He had practiced at Milwaukee 32 years. Member Milwaukee County Medical Society.

Dr. Robert J. Dysart, assistant superintendent State Insane Asylum at Winnebago, died on May 27th, 1914, aged 41 years. Death was due to endocarditis. Graduate University of Illinois, College of Medicine, 1900. Member Winnebago County Medical Society.

Dr. George R. Bugbee, Wausau, died on May 14, 1914, of heart disease. He was born at Waterford, Vermont, February 7, 1849. Graduate of the Medical College, University of Michigan, and the Dartmouth Medical College at Hanover, N. Y., 1872. Member Marathon County Medical Society.

Dr. Carl R. Feld, Watertown, died on May 12, 1914, aged 56 years. Death was due to diabetes. Dr. Feld was born at Watertown December 14, 1858. He was a graduate of Rush Medical College in 1891. Member of the Assembly in 1885, 1887, 1889, First District Jefferson County; secretary of the Board of School Commissioners, health commissioner of Watertown, serving for nearly twenty successive terms. Member of Jefferson County Medical Society.

Dr. Edgar H. Neyman, age 48 years, for twenty years located at Milwaukee, died on June 8, 1914, after a year's illness. Graduate of the University of Strassburg, Germany. Member Milwaukee County Medical Society.

Dr. William Hamilton Sarles, Oshkosh, died on June 9, 1914, aged 75 years. Dr. Sarles sustained a stroke of paralysis five years ago, which necessitated his retirement from active practice. He was born in Delaware County, Ohio, in 1839. Educated at the State Line and Lawrence Colleges. Graduate of the Chicago Medical College, 1865.

Dr. W. T. Rinehart, Ashland, died on July 2, 1914. He established the Rinehart Hospital at Ashland, was a former health commissioner of Ashland. Graduate Jefferson Medical College, Philadelphia. 1886. Member Ashland County Medical Society.

Dr. Albert F. Boretti, medical director of the Department of Pathological bacteriology at Marquette, died on July 17, 1914, at Medford, Mass., following an operation on his tonsils, aged 29 years. He was born in Italy, and came to America at the age of 17 years Studied at Boston University and Harvard Medical School. Member Milwaukee County.

Dr. E. J. Farr, Eau Claire, died on July 11, 1914, aged 82 years. He was born at Cornith, Orange County, Vermont, received his early education at Bradford and Thetford Academy, read medicine with Dr. Cyrus Carpenter, received his degree at Castleton, Vermont, in 1852, attended the New York Medical College and Bellevue Hos-

pital two years. He was an assistant surgeon 30th Wisconsin Volunteer Infantry.

Dr. Stella B. Nelson, Oshkosh, died suddenly on June 26, 1914, of heart disease, aged 55 years. Graduate Northwestern University Woman's Medical School, 1882. Member Winnebago County Medical Society.

Dr. Wilmot F. Miller, Milwaukee, died suddenly on August 15, 1914, of diabetes. Born at Tomaqua, Pa., graduate University of Michigan Medical Department, 1887. Member Milwaukee County Medical Society.

Dr. James Cox, Jefferson, died on August 19, 1914. He was born in the town of Dover, near Burlington, Wisconsin, in 1876. Graduate of the Northwestern University Medical School, Chicago, 1904. Member of Jefferson County and the State Medical Societies.

A. W. MYERS, Chairman.

PRESIDENT: The next is the report of the Delegate to the National Legislative Council, by Dr. Hitz. Dr. Hitz is not present.

The next business is the report of the Delegate to the Council on Medical Education, Dr. A. J. Patek, Chairman.

DR. A. J. PATEK, Milwaukee: I have received no communication from any source intimating that I was a member of that Committee, and so I have no report to make. I think I was nominated delegate last year, but so far as I know there was no meeting held, at least no meeting to which I was invited. So I have no report whatever to make.

DR. H. E. DEARHOLT, Milwaukee: Precisely the same thing happened to me last year, as a delegate. I never knew that there was to be a meeting until after it had been held. Having had exactly the same experience as Dr. Patek, it seems to me that if we are going to elect a delegate to the Council on Education and the other American Medical meetings, that some means ought to be devised of apprising those delegates of meetings.

PRESIDENT: That is very true.

The next is the report of the Delegates to the Annual Meeting of the American Medical Association. by Dr. McGovern.

# REPORT OF DELEGATES TO AMERICAN MEDICAL ASSOCIATION.

The House of Delegates of the American Medical Association met at Atlantic City, June 22, 1914.

The report of the secretary showed a total membership of 41,029, or a net gain of 3,116 for the past year.

The report of the Board of Trustees begins with the following statement: "The past year has been distinguished by no unusual events; all of the forms of activity

by which it serves the medical profession and the public have been marked by successful effort."

The American public is beginning to recognize in the American Medical Association an organization that is striving honestly to assist the sick and afflicted and to improve as far as possible the human species. Its ideal of upbuilding and assisting suffering humanity is carried out through the medical profession.

The Council on Pharmacy and Chemistry has established a chemical laboratory that employs three chemists besides the director of the laboratory, who devote their entire time to investigating patent medicines and assisting in the other work under the direction of the Council. The committee has selected a list of drugs and published it in book form called "Useful Drugs." The investigation of patent medicine has been placed under a new department called the Propaganda Department. This department has attacked dishonest medical advertising everywhere, and it is receiving the support of a large number of the lay press and its findings are accepted as final.

The entire income of the association is expended in investigation and in publishing magazines, pamphlets and books. The general Association expense has jumped from \$40,000 in 1910 to \$80,000 in 1913. The Archives of Internal Medicine and The American Journal of Diseases of Children were published at a loss the past year.

Under the direction of the Council on Health and Public Instruction over 57,000 pamphlets covering many subjects for the instruction of the public were published the past year.

The report of the Council on Medical Education shows steady progress since 1904 when the Council was organized. The report in reviewing the work of the Council shows that the total number of medical schools in the United States has been reduced from 160 to 100. The entrance requirements have been raised so that this year 82 of the 100 colleges require one or more years of college work in addition to a four year high school course. Eighteen states licensing boards have adopted the one or two years' college work as their minimum standard of preliminary education. Of these soven require two years of college course as their standard. Three other states expect to join the list in the near future. Wisconsin is not in any of the lists. State Boards are urged to make a hospital internship compulsory.

Hereafter no college conducted as a stock company can be graded higher than class C.

The Council has opened a new department, the Medico-Legal Bureau, through which information concerning medico-legal questions in all the states may be obtained at a common source. A book, containing all of the decisions of the Supreme Courts of this country on medical practice acts, will be published some time this year.

Another sub-committee that deserves special mention is the Committee on Cancer. They will soon publish for public distribution a series of pamphlets giving scientific information regarding cancer and its prevention.

The activities of the society for the coming year are to be directed along the following lines: (1) A thorough investigation of present health conditions; (2) The education of the public; (3) Crystalizing public opinion on the necessity and practicability of conserving human life.

A great many subjects were covered by the reports of the various committees that either pertained to the routine work of the committee or referred to the management of the society, but not of sufficient interest to the state society to warrant our enumerating them at this time.

Very respectfully submitted,

J. J. McGovern.

PRESIDENT: We shall have to postpone the report of the Committee to act with Board of Public Instruction A. M. A., by Dr. Bardeen, who is not present, unless he has sent in his report by the other members of the Committee.

The next business in order is the report of the Chairman of Council, Dr. Evans.

Dr. Edward Evans, La Crosse: Mr. Chairman, in this connection, I do not think there is really any report necessary. There has been nothing of any importance that will not appear in the reports of the secretary, as secretary of the council, and the various reports made by the different councilors from their districts. I do not think that either you or the secretary has anything to suggest that should be brought before this body by the chairman of the council. There has been nothing of any importance dealt with except the election of the new secretary, and I suppose that proper cognizance will be taken of that in proper place.

PRESIDENT: The report of the Chairman of Council will be understood as accepted and approved, and we will now listen to the report of the different councilors. The councilor from the 1st District is Dr. Wilkinson.

Report of 1st District presented by Dr. M. E. Wilkinson, Oconomowoc, as follows:

I would say in general that the societies of the county are getting on as usual, with the exception of the society of Washington County. There is some little disagreement among the members, and both myself and the state secretary have tried to investigate and determine as to the cause; but we have been unable as yet to find it. It seems that no one knows what the cause is.

But the meetings have been held as usual.

Jefferson County is having meetings regularly, and so also are Dodge County and Wankesha County.

The District organized a District Society one year ago, and had a meeting at Oconomowoc. This year they met at Hartland, and listened to a very instructive paper by Dr. Bayard Holmes, of Chicago. It was a treat.

The membership of the other counties remained about

the same as they were, with one or two delinquents, and we had two deaths in Dodge County, Dr. Joyce, of Waterloo, and Dr. Cox, of Lake Mills. The particulars of their deaths I have not learned as yet. Probably the report of the Committee on Necrology will account for them.

I can give you the exact figures of members of the Society. I have them here:

In the middle of September Dodge had 31, Last year 31, this year 32; delinquents 2; a gain of one.

Jefferson last year 30, this year 32, a gain of 2. Dr. Feld, of Watertown, died, I think within the last year.

Washington 16, with a loss of 5.

Waukesha last year 45, and this year 40, a loss of 5, but chiefly due to removals and deaths.

I would say that throughout the District there is a feeling of harmony,

In Dodge County and Waukesha County we have met with two programs during the past year.

I am glad to report that the condition of the District is very satisfactory with the exception of Washington County, and we are going to try and determine within the next year what the difficulty is, and try and helpthem straighten right about, and go ahead with theirwork

PRESIDENT: How umch of a loss?

SECRETARY: A loss of two. It has been made up. You have a gain of one in the District now?

DR. WILKINSON: A gain of one all told. Thegeneral spirit throughout the District is good, except Washington County.

I must hand the bouquet to Dodge County. They have surpassed themselves the past year. They were a little sleepy for a few years, but are going at high speed now.

PRESIDENT: We passed by the report of the Committee on Medical Defense, and that report has since been received, and Dr. Patek will read it for the Chairman, Dr. Seaman.

The report of the Committee on Medical Defense was read by Dr. A. J. Patek, Milwaukee, and after full discussion was accepted and placed on file.

PRESIDENT: We will now listen to the report from Dr. McMahon, regarding Dr. Sullivan's views on the report of the Committee on Public Policy and Legislation. Dr. McMahon will read it.

ADDITIONS TO REPORT OF COMMITTEE ON PUB-LIC POLICY AND LEGISLATION PROPOSED BY DR. F. F. BOWMAN AND DR. AR-THUR G. SULLIVAN.

An attempt should be made to secure legislation which shall require that any medical student who presents himself to the Wisconsin State Board for examination for a practitioner's lieeuse shall have had at least two years of university work before having entered the study of medicine.

This is the only state in the Northwest which admits young physicians to practice who have had nothing but high school education before entering upon their medical course.

All states in the Northwest require at least one year of a Liberal Arts course, while Minnesota, Indiana, Iowa and both Dakotas require two years of preparatory work before the eandidate studies medicine. Inasmuch as both medical schools in the state of Wisconsin require two years' preparatory work in Liberal Arts, it would seem only fair to them to raise the standards in this state, at least up to that of our neighbors.

The University of Wisconsin's Department of Clinical Medicine has assumed the practice of medicine. University students, the faculty and their families, university employes and their families, as well as townspeople having no university connection, go to make up the patients treated.

The feeling is widespread that NO university has the right to pursue the practice of medicine along the linesthe University of Wisconsin has the past three years, or comtemplates the ensuing year.

An effort to secure legislation which will curb activity along the lines which are considered pernicious, and which are obviously unfair, will be attempted.

> F. F. BOWMAN, ARTHUR G. SULLIVAN.

During the reading of the report Dr. McMahon said:

Dr. McMahon: There was very little said in the other report with reference to advancing preliminary educational requirements, for the reason that the question of re-writing the Medical Practice  $\Lambda$ ct, under which caption this subject properly comes, will be discussed before the full membership, by Mr.  $\Lambda$ . C. Umbreit, attorney for the State Board of Medical Examiners, on the last day of the meeting.

Many of you will recall that what was probably the most advanced piece of proposed legislation ever introduced before any legislature was presented at Madison, two years ago, by Mr. Umbreit. The bill received more or less support from the members of the profession, but it made very little headway, because of the opposition of all of the so-called antis.

A hearing was had in the Assembly Chamber, which was attended by 8 or 10 physicians, by 7 coaches full of Christian Scientists and other irregular practitioners from Milwaukee. The hearing resolved itself into a kind of an "experience meeting." "The experience and other features"

made such an impression upon the legislators that they refused to give the bill further consideration.

The advisability of attempting to introduce and secure the passage of a similar bill during the incoming session of the legislature has received some consideration from the Committee, or at least from your Chairman and other members of the Society who have given the matter consideration. The consensus of opinion seemed to be that this is not an auspicious time to attempt such advanced legislation as the proposed bill would be and that probably the most that should be attempted during the next session is an amending of the present act so as to incorporate the first paragraph of Drs. Sullivan and Bowman's report, viz., to advance the preliminary requirements to the equivalent of a two vears' premedical course at the University of Wisconsin. The same members thought it would be well to remove from the present act the clause defining what constitutes the practice of medicine, thereby leaving that question entirely to the courts. Their reason is that it would be easier to enforce the law if this definition were eliminated.

It would therefore be the policy of the present Committee on Public Policy and Legislation, unless directed otherwise, to limit their efforts to advancing the preliminary requirements to the extent just stated.

PRESIDENT: For those coming before the Board from other states?

DR. McMahon: From any state.

PRESIDENT: We already have two years.

Dr. McMahon: Yes, Wisconsin medical schools require it, but the state law does not. Physicians graduating from medical colleges whose preliminary requirements are still on a high school basis can come into Wisconsin and demand that they be given an examination. It is readily seen, then, that, if the law were amended to cover this feature, it would be a considerable advance. I believe, however, that the question had better be left open until you have heard the paper on this subject, by Mr. Umbreit, which the Program Committee has scheduled for Friday morning.

The supplementary report, prepared and signed by Drs. Sullivan and Bowman, just reached here by messenger, and I would be under obligations for permission to present it at this time.

PRESIDENT: Are there any remarks on this supplementary report?

Dr. L. M. Warfield, Milwaukee: It seems to me that that supplementary report is a rather serious indictment of the policy of the University of Wisconsin in the Clinical Department, and that it would be better to hold that report open until we can hear Dr. Bardeen, who is Dean of the Medical Department, and well conversant with the situation and policy of the institution.

I do not suppose that any one of us knows fully just exactly what is going on there, although in general we do know that the University of Wisconsin is trying to do its best, largely in preventive medicine, but just how far the University has extended itself into the city, as is charged there in the supplementary report, I do not know that any one of us is absolutely cognizant of.

It therefore strikes me that rather than have the report accepted, it had better be laid on the table until such time as we can get further information.

PRESIDENT: Are there any other remarks? Of course, the first part of the report refers to the qualifications of applicants before the Board of Medical Examiners.

DR. WARFIELD: May I ask, was there not in this House of Delegates last year a resolution passed, incorporating just such a two years' requirement for a license to practise medicine and favoring such a requirement. Do you recall it?

PRESIDENT: I do not recall it distinctly, Doctor.

DR. H. W. ABRAHAM, Appleton: I think I can give you the information. I introduced the resolution, which was the same resolution passed by the Board of Medical Examiners, requiring at least one year of college work, and specifying in what particular branches. The State Board of Medical Examiners passed a resolution asking the next legislature to embody that provision.

PRESIDENT: The resolution was passed?

Dr. Abraham: The Board has no power to raise that standard without legislation.

PRESIDENT: The recommendation of this supplementary report is, that the Society use its efforts to induce the Legislature to authorize the State Board of Examiners to make that requirement, that all applicants coming before the Board shall have graduated from a school of medicine requiring two years, or one year, as the case may be of work in a College of Arts. As has been said,

there are twenty states now that require one or more years, and seven of these require two years, of any individual coming before the Board. Of these states, four that require two years, are directly west of us, that is Iowa, Minnesota, and the two Dakotas, while Indiana requires two years, Michigan and Illinois each require one year, so that, as has been said in this report, this is the only state in the whole Northwest that admits graduates of other schools to come here with only a High School preparation, or even less.

Dr. H. E. Dearholt, Milwaukee: I was talking to the chairman yesterday, and my impression was and is that we endorsed two years of premedical education in our action of last year. That was Dr. Jermain's recollection. He introduced the resolution last year.

PRESIDENT: I have forgotten. Dr. Abraham may be able to inform us on that point.

DR. ABRAHAM: I think it was the same resolution as the one before the Board,—one year; it ought to be two years; when that was before the Board there was no action taken by Marquette University and the Board wanted to go slow with it. They would rather have one year than none at all, and thought that after they got the first year they would get the second. And since Marquette has raised their requirement to two years, and the University has always had that requirement, there is no reason why we should not have the two years.

PRESIDENT: Of course my idea is that we should try and get two years from the Legislature, and if we cannot get it all we shall have to be satisfied with what we do get.

DR. L. R. HEAD, Madison: I wish to state as in prefacing my remarks that I am a graduate of the University. I have four children who are graduates. I am and always have been a loyal friend to the University, but I want to say in reference to the suggestion of the supplementary report, that I think not only those regarding the Medical Education clause are justified, but those regarding the entrance of the University into medical practice, are exceedingly well justified.

I am a resident of Madison, a practising physician there and thoroughly conversant with conditions in the University. Upon principle and as a matter of policy, I think the attitude of the University is wrong, and I think the criticisms suggested in the supplementary report are well taken.

The medical men generally and everybody in the state as well, I think, were thoroughly in accord with the idea and practice of the University as regards preventive medicine for the students, and in so far as that has been carried out, there is no criticism, and I think there is no opportunity for criticism. But in the respect that the University has entered into the practice of medicine, including in their care the employes of the University, the faculty of the University and the citizens of Madison, and the surrounding country, I think they are exceeding their true function, and the function for which the Clinical Department of Medicine was established. It is a matter of general knowledge in Madison that this departure has taken place and according to the resolutions passed by the Board of Regents at the last meeting in August, there is intention to persist in it.

In the past three years they have not only done this but done it gratuitously. It is a matter of common knowledge that the whole faculty of the University get gratuitous treatment from the Clinical Department. They not only treat them, as far as consultations are concerned, but take charge of medical cases in their families, and without charge. They have simply run a free dispensary, and not one for charity cases, but a free dispensary for the well-to-do and the abundantly able to pay! The millionaire has been at liberty to go there and receive his treatment gratuitously just the same as the charity case; and as a matter of fact it has not been the charity cases that have received treatment, but the well-to-do population of the city and the surrounding country. Now, the protest against that can be made on ethical grounds. I believe firmly that the University has no right to enter into the practice of medicine in the manner in which they have done so, giving their services gratuitously to the well-to-do; and that has been the practice.

There are eighty men in Madison, who have gone their with honorable intentions to live; most of them have purchased their homes and paid good prices for them, and spent years there, and you know that a man's time in a place is his capital. They have invested years in the practice of medicine there, which is their capital. Now the University, with its clinical department, carrying a large amount of prestige back of it, as representing the University, steps in and engages in practice. and not only general practice but free practice.

Now the only difference in the resolution that

the Regents have passed this year, is that they shall charge a fee. Anybody in the state is allowed to go there and consult the Clinical Department on certain days in the week, Mondays, Wednesdays and Fridays, from 10 to 12; they have a perfect right to go there and consult the Medical Department of the University, and receive treatment. The fee is \$5.00 for the first consultation, and after that the fee is \$2.00. That is a little in excess of the fees charged by the local physicians and in that degree it is an improvement on the policy of the last three years. But that concession was made as the result of a conference and protest on the part of the County Medical Society. But what the Medical Society of Dane County protests against. is that the Clinical Department of the University shall enter the practice of medicine at all. We do not believe that they have any right to do so, or that that is a part of their function to take charge of any part of the medical practice except that which relates to the care of the students, and in so far as that is concerned they perform their function, and the medical profession of the county are entirely in accord with them, and believe they are doing a good work; but when they step outside of that and enter the general practice of medicine, we believe they are exceeding their function.

The law department have never as a department established a practice where the public could obtain legal advice gratuitously or for fees. It never should. The veterinary department has never been allowed to enter practice and no member of that faculty can be called even in consultation. It never should. What necessity exists, what excuse can be offered for an exception in favor of the clinical department of the Medical School.

Dr. Edward Evans, La Crosse: I do not like to join in this discussion, which would easily become interminable, but as I heard this resolution read I was reminded of a remark of Daniel O'Connell before the British House of Parliament, when he said in reference to a certain oath he was asked to subscribe to, that he knew part of it to be false, and believed the rest to be untrue.

Now this last resolution I do not know that the Board of Regents have passed. But while I was on the Board of Regents I know the position exactly of the Clinical Department there, and it is not fair to give the impression before this House of Delegates that they treat gratuitously the Faculty of the University of Wisconsin. Occasionally a man impressed with the prestige of that Depart-

ment would come in for consultation. It was not often that they treated any of the Faculty, and when they did treat them they would turn them off as soon as they possibly could. I know this for an actual fact.

Again, it is not fair to say that the whole profession of Madison (and the President will bear me out) was in agreement that this was a proper thing when we put in the student advisory corps out there, because there was a group of Madison physicians who fought it from the beginning. And it is not fair to give the impression here that it is something for the State Society to take up.

This supplementary paragraph in this report, if it has any place here at all, has a place before the council of this Society, who are the Board of Censors of the State Medical Society. It is a question of ethics. I can easily see the point of this recent resolution. If they are prepared there to do the work that some of us are not able to do, I, for instance send some of my work down to the University of Wisconsin, and am very glad to have a place where I can send it, we should be glad to avail ourselves of the privilege.

But the impression given here tonight, both in this written report and in the remarks of the last speaker, give a false impression. I do not want to carry this thing on interminably, but I know what I am talking about, and feel that an endeavor is being made to create capital on a false issue.

PRESIDENT: You were on the Board of Regents until what time?

Dr. Evans: Until a year ago last February.

DR. HEAD: I want to say that I have not stated a thing here that I cannot prove by the Faculty of the Clinical Department of the University, not one thing. Dr. Bardcen, Dr. Evans and all the other medical men of the University will acknowledge everything that I have said, that they have indiscriminately treated every member of the Faculty that has come to them, and large number of the Faculty have come to them. They have not only treated the men and women, the wives and children of the Faculty when they have come to them, but they have gone to their houses and taken eharge of and conducted cases. Now if Dr. Evans knows to the contrary let him say so, and if he does not, he should not accuse me of unfairness.

DR. EDWARD EVANS: I said that unless within the last year and a half, it was not so, that they indiscriminately treated the faculty of the University of Wisconsin.

Dr. Head: I am stating what has been going on during the last two years. It is simply growing. They have always done it to my personal knowledge, and I can bring any amount of evidence of it. And this resolution that the Regents passed recently was a result of a protest on the part of the County Society, in conference with Dr. Bardeen and Dr. J. S. Evans, in which they admitted all these things and protested that it was unjust to the Faculty of the Clinical Department to be burdened with it, and that they wished to be relieved of it.

PRESIDENT: Are there any other remarks, or is there any motion?

Dr. Cantwell: If we are going to discuss that matter, would it not be fair to wait until Dr. Bardeen and Dr. Evans are here?

PRESIDENT: The suggestion has been made that that part of the supplementary report be laid on the table until Friday, and it might be proper, however, to act upon the first part of the supplementary report, so far as the requirement of two years is concerned. I will read the resolution adopted last year, which was offered by Dr. Jermain.

Whereas, The council of your Committee on Medical Education and medical educators in the United States are agreed that the most desirable preliminary requirement to a medical education is two years of college work, including the physics, chemistry, biology and a foreign language, this college course to succeed upon graduation from an accredited high school course; and.

Whereas, Many states, including our neighboring states of Minnesota, North and South Dakota and Iowa, have already, by law or ruling of the State Board of Examiners, adopted such preliminary requirements, therefore, be it

Resolved, By the House of Delegates representing the Medical Society of the State of Wisconsin, that steps be formally taken, either by enactment of the proper law or by ruling of the Board of Examiners, if such be within their powers, to adopt the above preliminary requirements for this state.

The only difference between that and the purpose of the resolution in this report, was that specific measures should be taken to secure from the coming Legislature an amendment to the law, requiring two years, if possible, and if not, one year, of preliminary work, for all practitioners coming

before the Board. Before acting upon that, Dr. Warfield has asked me to read this resolution.

DR. WARFIELD: No, I just want you to look it over. That was simply a resolution I made up. It is unnecessary, I think, now, if that resolution is passed. I hardly think that resolution is worth while as long as we are on record.

PRESIDENT: This is more definite. I think it might be as well to offer this at this time, if you are willing.

DR. WARFIELD: I am perfectly willing. It can be passed or not, as the House of Delegates see fit.

PRESIDENT: Before acting on this resolution, however, I will entertain a motion to lay this supplementary report on the table in whole or in part, as you chose.

DR. HEAD: Mr. President, I make that motion, that it be laid on the table until they are here.

Motion put and carried.

The report of the councilor from the 2nd district was presented by Dr. G. Windesheim, Kenosha, as follows:

Kenosha, Wis., Oct. 6, 191	4.
Total membership in District Oct. 4, 1914	
Honorary members reported not paying dues	7
Net paid up membership	100
Paid up membership one year ago	101
Net loss for the year	1
Losses-	
Deaths of members in the district during the year	2
Removals out of the district, not counting removals	
from one county into another county in the same	
district	3
Loss of member on account of revocation of license	1
Delinquents, some of which will probably pay dues	
before the end of the year	5
Total loss of members (former members)	11
Net loss of paid-up membership	1
	7.0
Consequently there was the same weathers to the	10
Consequently there must be new members in the	0118-

Last year five delinquents paid their dues between the time of the meeting of the State Society and the end of the year. Should the same number do so this year the membership will be at 105 at the beginning of 1915.

The district meeting this year was held at Lake Geneva. Although heavy rains had made the roads so bad that a number who had intended to come in automobiles

could not be present, the meeting was well attended and very instructive,

In general, the fraternal spirit and interest in scientific work is improving and, with few minor exceptions, conditions are good in the district.

Racine County, with a membership of 38, holds meetings every other month with an average attendance of 14; greatest 20; least 12. The programs are very good.

Walworth County, with a membership of 26 to 30, holds four regular and some extra meetings during the year, with very good average attendance and very good programs.

The former Secretary in Walworth County, Dr. M. V. DeWire, having resigned, your present third Vice-President, Dr. E. H. Kinne, was elected to the office. While it will be very difficult for Dr. Kinne to surpass his predecessor in efficiency, I am certain that he will endeavor to keep up the splendid work of the Society.

Kenosha County, with 36 members, held eleven meetings during the year with an average attendance of 15; greatest 24, least 12. Programs very good. Unfortunately, during the past year or two, some disturbing elements, personal and otherwise, have made their appearance in Kenosha, which have had the effect of diminishing the interest in the Society. At the present time, however, the outlook is again promising, and I believe that before long Kenosha will again resume its former enviable position of pre-eminence in fraternal spirit and professional ethics, with highest ideals in the practice of medicine.

Respectfully submitted,

G. WINDESHEIM, Councilor Second District.

PRESIDENT: A very fine report, but the conditions are a little more favorable in the 2nd District. than elsewhere. We will now listen to the report of the councilor from the 4th District, Dr. Cunningham.

The report of the councilor from the 4th District was presented by Dr. Cunningham, Platteville, as as follows:

Dr. W. Cunningham, Platteville: I should like to report that the general condition of the district has considerably improved.

In the ease of Lafayette County, heretofore the organization was not very well perfected. At the present time they have a perfect organization, and are having some meetings.

Iowa County, while organized previously, was deficient in activity, but has become active now.

Crawford County is about the same.

Grant County has kept up a record of continually improving a little in enthusiasm and attendance at the meetings.

The general condition throughout the district on the whole are considered pretty good.

PRESIDENT: Is there a net gain, or loss?

SECRETARY: A net loss of three.

PRESIDENT: The 5th District, the councilor is Dr. Zierath.

The report from the 5th District was presented by Dr. W. F. Zierath, Sheboygan, as follows:

Dr. ZIERATH: There is very little to be said about the 5th District except that it has a very poor councilor. I have not made any visits this year, because every time I started away from home, somebody had a baby, or fell down stairs and broke an arm or leg; but that made no difference, because nobody needed me. The counties are all doing very well.

We have a net loss of 3, but that is due to the fact that some of the members in Ozaukee County have not come into the county societies. Ozaukee County has no county society. There are 17 physicians practicing in that county. It is a small county, and the interurban and railroad facilities are very good, but I have not been able, after considerable work, to organize a county society this summer, but the prospects of getting one within the next month are very good. I have corresponded with most of the men in the county, and a good many of them were very lukewarm concerning the proposition. But during this last week I had a long telephone conversation with Dr. Hurth, of Cedarburg, who is the old secretary of the county society they had ten years ago, and he feels that within the next week or two he can get a crowd together and organize a county society.

We have a net loss of 3 in our district, which will be made up within a very short time.

The scientific side and professional side of the work there is very gratifying.

PRESIDENT: I heartily sympathize with Dr. Zierath in regard to Ozaukee County, and I hope that he will have better success than we have had.

Dr. ZIERATH: We will get them before Christmas, Mr. President.

PRESIDENT: I trust so.

The report of the councilor from the 6th District was presented by Dr. H. W. Abraham, Appleton, as follows:

Dr. H. W. Abraham, Appleton: Mr. President, the 6th District comprises the counties of Door, Brown, Kewannee, Outagamie, Fond du Lac. and Winnebago.

I think the Society is especially interested in Door County, because something was said about Door County last year, and I am happy to report that we have Door County thoroughly organized, and practically every cligible physician is a member of the Association. They have a good secretary, and are anxious to do good work, and I hope it will continue.

I can also say that there has been a gain in every county in the district. The work has been progressing well. They have had regular meetings in all the counties, and have had good papers, and there is good feeling everywhere. I think the work has been advancing from year to year in respect to that feature, the good feeling.

As to the totals, last year we had a total of 182, and this year a total of 201, making a gain of 19 in the district.

Up to Oct. 4 there were only two delinquents. By deaths and removals we lost 7; and we have gained 27 new members, making a total gain of 19.

PRESIDENT: We will next hear from the 7th District, Dr. Evans.

The report of the councilor of the 7th District was presented by Dr. Edward Evans, La Crosse, as follows:

DR. EDWARD EVANS, La Crosse: There are 102 members in the 7th District, in good standing, a loss of 3, according to the state secretary, and a loss of only one according to the county secretary's report as given to me.

We really have had a gain in eligibles, because owing to deaths and removals there are ten accounted for.

There are at the present time something over twenty who are eligible and are not in. I think we have about the same number of ineligibles who are in. (Laughter.)

The rather dark spot is still Vernon County. While they have the same number of members that they had last year, 12, there are 13 non-affiliated in the county. It seems a hard place to get at.

Last year I recommended that this year an embalmer be appointed in my place, and from the letter of one of the county secretaries I think that would still be advisable, because he says he don't know what they have died of, but supposes it is dry rot.

The counties have not been doing well in a scientific way, with the exception of La Crosse. They hardly hold meetings at all.

In La Crosse we have every man in who ought to be in, and perhaps some others, and the meetings are held once a month.

One thing that is ereditable in the district, and I think is perhaps true all over the state, that is the effect that the medical defense has had on the profession. I do not think that if the poorest and most unfit doctor in the district had a malpractice suit brought against him, and had justice on his side, that you could get any of the physicians from the 7th District to testify against him; and that in spite of the fact that we have the usual amount of personal jealousies and bickerings and that sort of thing. But I am sure that in the 7th District at least, and from the report of our Medical Defense chairman, I believe throughout the whole state, medical defense has done good work. The first requisite to start a damage suit is to get some doctor who has some pique or something like that, and is willing to give evidence. I do not think there are any of them in the 7th District.

PRESIDENT: We will now hear from the 8th District, Dr. Redelings.

The report from the 8th councilor district, was presented by Dr. T. J. Redelings, Marinette, as follows:

DR. T. J. REDELINGS, Marinette: The 8th District ecomprises Marinette, Florence, Oconto and Shawano Counties, and in spite of the regular inactivity of its councilor, the district is still on the map.

We have lost 3 members in the district by death and removal. We have gained two new members in Marinette.

Florence County is very nearly at its normal strength. They have lost two in the past year.

Shawano County has lost one.

I think that the professional enthusiasm and the scientific activity in the two counties are normal for that locality.

Oeonto County is dead. It is so dead that it reeks, and the councilor wishes to announce to this body that he has positively refused to go down for further resurrections. I have corresponded with a number of the members, and declared to them that I was ashamed to go down and do what I had done in these past twelve years, and that is, go down and arrange for the meetings, and drum the men into some doctor's office, corral them like you would thieves, and browbeat them into holding a meeting, and then go down and aet as the general on the date announced for the meeting.

There has been no meeting in that county this year. There is only a loss of 4. And no one here can possibly appreciate the difficulty which the topography of Oconto County throws about the physicians in that county. I say to you that it takes me two days to make a visit to Shawano County, and it takes the men in Oconto County part of two days to attend a meeting in the city of Oconto, and really, men are to be pardoned for apparent indifference. I do not think it is entirely indifference.

PRESIDENT. The topography of the country is probably the cause.

Dr. Redelings: In a general way 1 think the 8th District has no apologies to offer. It regrets having fallen short three members, and hopes to make them up next year, and the district bids for a new councilor, new blood, new life, new energy, and maybe that will change matters on the secretary's records.

PRESIDENT: They have a fine councilor there. This report will be accepted and placed on file. The next is the 9th District.

The report from the 9th District was presented by Dr. T. H. Hay, Stevens Point, as follows:

Dr. T. H. HAY, Stevens Point: Mr. President, and Gentlemen: 1 am sometimes stunned by the fact that I had to leave the 12th Councilor District and its good fellows, but when I have so creditable a district to report from as the 9th Councilor District, I am somewhat reconciled to the change.

The 9th Councilor District maintains the largest number of counties of any district in the state, and the most widely scattered.

There are Clark, Green Lake, Waushara, Grant, Marathon, Adams and Wood Counties, and we have had, I think, in all those counties except Clark County, at least

four meetings a year. Clark County has been unable to get its men together, and they have as a rule met with Wood County. The membership of Clark County has gained one during the past year, in spite of the fact that it had nothing individually to offer. The number in that county this year is 19, as against 18 last year.

There have been gains in several of the counties, as in Portage County, which has gained 3 members. Marathon County remains the same. Lincoln has gained 2; Green Lake, Waushara and Adams, which are a district society, gained one. There has been a loss of 4 members in Waupaca principally from deaths and removals.

Wood County has remained the same.

We have a total membership of 163 members this year as against 163 last year, so that we lost nothing, and gained nothing. But out of nothing God created the heavens and the earth, and so we don't know what we will create. We have had 3 deaths and 9 removals, and our new members amount to 12, so we have done quite satisfactorily, 1 think, in our district.

PRESIDENT: An excellent report, and it will be placed on file.

The next report is from the 10th District, Dr. Cairns. If he is not here, the next is the 11th District, Dr. Dodd, and he also is not present, so we will hear from the 12th District.

The report of the councilor from the 12th Distract was presented by Dr. H. E. Dearholt, Milwaukee, as follows:

Dr. H. E. DEARHOLT, Milwaukee: There has been an apparent loss of 19 members in Milwaukee County.

SECRETARY: Dr. Hopkinson informs me today that he has 10 of these, so that will cut it down to 9.

DR. DEARHOLT. I wanted to put emphasis on the "apparent." By Jan. 1, I think there will be no question but what Dr. Hopkinson will render an account that will be as good as last year.

PRESIDENT: How much is the apparent loss?

Dr. Dearholt: The apparent loss is 19, with 10 of those made up, according to Dr. Sleyster.

PRESIDENT: Only 9.

Dr. Dearholt: Nine, and 29 delinquent, and 15 deaths and removals, with 26 new members.

Everything is going splendidly, and the credit, as I said last year, is due to the secretary and the officers of the Milwaukee County Medical Society.

PRESIDENT: This report will be accepted and placed on file. We have now heard from all of the districts except the 3rd, 10th and 11th.

The next order of business will be the report of the treasurer, Dr. Hall.

The report of the treasurer was presented by Dr. S. S. Hall, Ripon, as follows:

### TREASURER'S REPORT.

Озикови, Wisconsin, October 7, 1914.

18.75

S. S. Hall, Treasurer, in account with the State Medical Society of Wisconsin:

S. S. Hall, Treasurer, in account with the State Medical Society of Wisconsin:		
DEBTOR.		40 550
Balance on hand September 30, 1913		
Total		\$7,232.72
CREDITOR.		
Jan. 3—Wisconsin Medical Journal.  June 22—Wisconsin Medical Journal.		
Jan. 3—Hotel Pfister, Councilor's Lunch	\$ 7.30	\$1,700.00
G. Windesheim, Councilor Expense.		
T. J. Redelings, Councilor Expense		
H. W. Abraham, Councilor Expense.		
J. M. Dodd, Councilor Expense		
R. U. Cairns, Councilor Expense		
		96.14
1913. Oct. 18—Jos. P. McMahon. Exp. Com. P. P. & L	ė 10.00	
Nov. 4—Philip F. Rogers, Exp. Com. P. P. & L.		
C. H. Lemon, Exp. Com. P. P. & L.		
L. F. Jermain, Exp. Com, P. P. & L.	6.50	
L. M. Warfield, Exp. Com. P. P. & L.		
R. W. McCracken, Exp. Com. P. P. & L		
W. G. Darling, Exp. Com. P. P. & L.		
Timlin & Dean, Exp. Com. P. P. & L		
Wisconsin Medical Journal, Exp. Com. P. P. & L	12.25	
1914.		
Aug. 21—Aliec Hays, Exp. Com. P. P. & L	9.50	•
Riverside Printing Co., Exp. Com. P. P. & L	68.97	
1913.		288.43
Oct. 6—C. S. Sheldon, Expense	94.83	
Nov. 22—Rock Sleyster, Expense.		
1014		
1914. Meh. 31—Rock Sleyster, Expense	18.76	
Rock Sleyster, a'c Disbursements	22.21	
May 9-J. L. Yates, Postage Cancer Commission		
June 5—Augusta Brink, Expense Cancer Commission		
June 8—Rock Sleyter, Expense		
Aug. 17—Rock Sleyster, Expense		
S. S. Hall, Salary.	-	
S. S. Hall, incidentals	20,00	
		771.74
1913. Oct. 4.—Dr. James Morley Hitzrot, Expense	\$ 75.90	
Oct. 10—Dr. C. F. Hoover, Expense.	29.10	
Oct. 3—Hotel Pfister, Ginger Tea		
Oct. 10—Parsons Ptg. & Sta. Co	. 56.50 18.75	

Feb.	5—Parsons Ptg. & Sta. Co	19.25	
	: 31—The Globe Wernicke Co	10.75	
	6—Parsons Ptg. & Sta. Co	42.50	
	e 8—Henry Sullivan Engraving Co	5.75	
	American Medical Association, Directory	7.00	
Aug	17—The Waupun Leader	16.00	
0	Henry Sullivan Engraving Co	5.75	
	Volksfreund Publishing Co	7.00	
	Goodwin, McDermott & Cowan, Stenog.		
			636.55
	Total		\$3,492.86
	Balance on hand.		
	t		0.1100.00
	Total		\$7 939 79

Dr. J. P. McMahon, Milwaukee: I would like to ask the treasurer whether or not the accounts charged to the Committee on Public Policy and Legislation were not bills which were O. K.'d by the chairman of the Committee and whether the checks in payment of them were not forwarded to the debtors by the treasurer, with the exception of \$8.00 or \$10.00.

Dr. Hall: Yes. I can give the items here, I think, of the persons that received it.

DR. McMahon: The Committee contracted the bills, O. K.'d them and forwarded them to the treasurer for payment. The money that passed through the chairman's hands did not exceed \$10.00 and was expended for telephonic and telegraphic charges during the last session of the legislature. The largest item in the Committee's expenses was \$100.00 paid to attorneys Timlin and Dean, who appeared against and labored four or five days to prevent the passage of the optometry bill. I believe it would be well to have all the items read before the house so that the members may know just what the money was expended for and at the same time give the members additional data upon which to indicate the amount they want to spend during the coming session of the legislature.

DR. HALL: I have the bills, and the Auditing Committee can see what they were, but I will read the items that are in the report.

PRESIDENT: If there is no objection this report will be referred to the council for approval.

We will now listen to the report of the secretary.

Dr. M. R. Wilkinson, Oconomowoe: I move that we adjourn.

Dr. J. P. McManon: I have a communication

here from the Mayor of Milwaukee, addressed to the State Medical Society, which I would like to place on file, because it is likely that I shall have to leave at 2:30 A. M. and I may not be able to return.

Dr. G. Windesheim, Kenosha: There is a motion to adjourn at the present time, which has not been seconded and according to our constitution the Committee on Nominations must be selected at the first meeting of the House of Delegates. We might make a motion to postpone the rest of the reports and work, as outlined here in the order of proceedings, and proceed with No. 20 of the order of proceedings.

President: Dr. Windesheim is an authority upon the eonstitution and by-laws, and undoubtedly he is correct. We will assume then that it is proper to omit the other portion of the program and proceed at once to the election of the Committee of 12 on Nominations, one from each District. This Committee on Nominations, as you know, selects the officers for the coming year, and the members of certain committees. The ordinary method has been for the nomination from each District from the floor; or, if you wish to eonsult in regard to the matter, sometimes there has been a short intermission for that purpose, of selecting a eandidate among yourselves. A motion is in order as to the method of election of this committee. Shall it be by nomination from the floor, or shall it be by conference in the different councilor districts?

Motion made that the nominations be from the floor.

Motion seconded.

Motion put and carried.

PRESIDENT: We will nominate from the floor. I will ask the secretary to call the councilor districts in order, and you will please make your nominations.

The following names were placed in nomination from the floor: 1st District, Dr. Hoffmann; 2nd District, Dr. Adams; 3rd District, Dr. Head; 4th District, Dr. Cunningham; 5th District, Dr. Currans; 6th District, Dr. Corbett; 7th District, Dr. Townsend; 8th District, Dr. Cantwell; 9th District, Dr. Wood; 10th District, Dr. Tupper; 11th District, Dr. Conkey; 12th District, Dr. Stoddard, and in each ease, on motion duly seconded and unanimously carried, the secretary was instructed to east the ballot of the Association for the respective nominations made.

Dr. J. P. McMahon, Milwaukee: In as much as the Nominating Committee is to select the place for the next meeting and in view of the fact that a communication, which I handed the president a few moments ago, is an invitation from the Mayor of the City of Milwaukee, I should like to have it read at this time.

Communication from Mayor of Milwaukee read by secretary inviting the State Medical Society to hold its next meeting in Milwaukee.

Dr. A. H. Levings, Milwaukee: I move, Mr. President, that the invitation be accepted.

PRESIDENT: The time for choosing our place of next meeting is at our closing session.

DR. C. B. CONKEY, Superior: I should like to invite the Society up to Superior for the coming year. You have not had a meeting there for eight years, and I do not think it has ever been twice held in the northern part of the state. I think it is our duty to have the meeting this coming year, and we certainly would give you a royal time if you do come, and in behalf of Douglas County I extend this invitation.

PRESIDENT: The usual time for deciding our place for the next meeting is at the last session. I think it would be proper to defer definite action until that time.

Dr. M. R. Wilkinson, Oconomowoe: I think according to our constitution that is to be decided at a later meeting.

Dr. Currens, Two Rivers: Superior is a good place, and the delegates can go over to Duluth when they go there.

Dr. J. P. McMahon, Milwaukee: It was not my purpose to have this invitation passed upon at this time. I simply desire to place it on file. The usual practice has been to leave the selection of meeting places to the Nominating Committee. In order to dispose of the subject for the present, I move that the Nominating Committee be empowered to select the place for the next meeting after having received all invitations which may be presented. It would not be fair to pass upon the question without affording an opportunity for other cities to present invitations also.

PRESIDENT: I hardly think it falls within the province, or duty, at any rate, of the Nominating Committee to appoint the place. They can suggest a place if they choose, and the House of Delegates can approve it if it chooses, but I think that is all that is within the compass of their duties in the matter.

Dr. Currens: I believe the Nominating Committee simply has the power to recommend. The matter has to be acted on by the House of Delegates.

On motion, duly seconded, the meeting adjourned to 9:00 o'clock  $\Lambda.$  M., October 7th, 1914, same place.

# MORNING SESSION, OCTOBER 7, 1914, 9 O'CLOCK A. M.

Meeting called to order by the President.

The minutes of the last meeting were read and approved.

The report of the councilor from the 10th District was presented by Dr. R. U. Cairns, River Falls, as follows:

Dr. R. U. Cairns, River Falls: Barron, Polk, Washburn, Sawyer and Burnett, the north half of the 10th District, form a large society, covering considerable territory, in which the doctors are very largely scattered, but they have a good, live society, with meetings four times a year, and which correspond almost to district meetings.

While I have not visited them during the last year. I know that they are in good condition.

The report last year was 39, and 2 dead; and this year 32, leaving a loss of 7 members. This loss is due to the fact that a number of men have moved out of the district, and the new men coming in have not yet affiliated, but I think will possibly do so at the beginning of the next fiscal year.

Chippewa County had 17 members last year, and 21

this, showing a gain of 4. I am glad to mark this improvement in Chippewa County. While this county is well situated for a society, it has lacked somewhat in fraternal spirit, but I am assured by some of the doctors there that the fraternal spirit is much better than it has been in the past.

Dunn-Pepin had 18 last year, and has 17 now, showing a loss of one delinquent, but the Dunn-Pepin Society is a thriving society, and except for the difficulty of the men in Pepin County in getting to the meetings, owing to the fact that they are a long ways from the place of meeting, the Society is in good condition.

Eau Claire County, with the city of Eau Claire as its base, always maintains a very good society, and one of the best, as far as meetings are concerned, in the district.

PRESIDENT: They have monthly meetings?

Dr. CAIRNS: Monthly meetings. They had 36 members last year, and 37 this, showing a net gain of one.

Pierce County showed 14 members last year and 14 the present year. This county was in rather poor condition a year ago, owing to some difficulties over the secretary, and is just getting on its feet again.

Rusk County has always been the problem in the 10th District. They are somewhat scattered and, worst of all, there is a great deal of jealousy among the physicians of the county, and they have never been together for affection meetings since the time of their organization, when they were cut off from the large society of Barron, Polk, Washburn, Sawyer and Burnett.

PRESIDENT: They requested to be cut off, however.

Dr. Cairns: They requested to be cut off, and were organized by my predecessor, Dr. Boothby. I was up and visited them once. They reported one meeting during the past year, but no scientific papers. The organization is only nominal, but they have a new set of officers who I hope will bring them closer together, and I am assured there is a little better spirit among the members than there has been in the past.

St. Croix County reported 18 members a year ago, and 18 this year, showing neither loss nor gain, but the county is in a fair condition, except for some dissension over contract practice work. Aside from that the society is in fair condition, having regular meetings.

PRESIDENT: The report of the councilor of the 10th District will be placed on file.

The only districts now remaining to be reported on arc Dr. Nye, of the 3rd, and Dr. Dodd, of the 11th, and I suppose they will be here.

I was directed to make out a list for the Governor from which to select a member of the state board of medical examiners, and that list was made ont as follows: Frank L. Van Kirk, Janesville; John M. Beffel, Milwaukee; A. G. Sullivan, Madison; E. E. Rose, Eau Claire; E. B. Brown, Beloit; C. M. Beebe, Sparta; Daniel Hopkinson, Milwau-

kee; G. Windesheim, Kenosha; L. M. Warfield, Milwaukee; and M. D. Bird, Marinette; and from that list Dr. J. M. Beffel of Milwaukee was selected by the Governor as a member of the board.

I was also asked to appoint a committee to act as an Advisory Committee of the Society, to work with the Industrial Commission. They wanted some medical men in whom they had confidence, and whose discretion and judgment they could rely upon to advise them in regard to medical bills, as to the amount and kind of bills which the medical men should hand in, in order to work equal justice in the case, to the people that would have to pay these bills, and to the members of this Society that would present them. They asked me, if possible to have all of them in one place so that they could more conveniently meet than if separated, and suggested that they be either from Milwaukee or Madison, and that they would prefer to have these men be in Milwaukee. I appointed as such Committee Dr. L. F. Jermain, Milwaukee, Dr. G. E. Seaman, of Milwaukee, and Dr. C. H. Lemon, Milwankee. This is the Committee representing the State Medical Society, to advise with this Industrial Commission in all matters connected with the medical services rendered.

In reply to a request for the appointment of a Committee on Conservation of Vision, of the American Medical Association, I appointed Nelson M. Black, of Milwaukee, to represent the Society upon this Committee.

I do not know how it happened, but it entirely escaped my memory that Dr. Patek was regularly appointed as a delegate to Council on Medical Education of the A. M. A. and later I asked Dr. Evans to act as such delegate. I owe Dr. Patek my humblest apology. Dr. Evans attended the meeting, and has sent a report to me, and perhaps I had better read it now.

He was also appointed as delegate to the Council on Health and Public Instruction of the A. M. A. as these meetings are always held in conjunction, and as a matter of fact he attended both meetings, so this report covers both the meeting of the Committee on Public Health and Instruction of the A. M. A. and the Committee on Medical Education.

REPORT OF DELEGATE TO COUNCIL ON HEALTH AND PUBLIC INSTRUCTION OF THE A. M. A.

As I was appointed delegate to the Committee on Health and Public Instruction of the Council on Medical Education of the American Medical Association, held in Chicago February 23 and 24, I beg to report for Wisconsin as follows:

First. The defeat of the Medical Practice Act, presented by Mr. Umbreit before the last legislature, was reported. Drew attention to the psychological phenomenon that legislators are more easily reached and influenced through the eye than the ear. After the appearance before them of a trainload of well dressed Christian Scientists, it was impossible to get them to listen to reasonable arguments far enough, at least, to have them pass this very desirable act. The Optometry Bill was passed by both branches of the legislature, but vetoed by the Governor.

Second. The passing of the important health bill, dividing the state into five health districts, and the appointment of an expert health officer to supervise and survey the health conditions in each district, was mentioned with approval, as was also the movement in Wisconsin for the appointment of whole time health officers in the cities of the second class.

Third. The Anti-Fee Splitting law was referred to.

Fourth. The important decision of the commission having in charge the Employer's Liability Insurance Act, denying the choice of a physician to the injured, was referred to as an important and far reaching influence in the relation of the physician and patient.

Fifth. I was able to refer with pleasure and approval to the great change that has taken place in the muical school situation in Milwaukee.

Sixth. I drew attention to the good work the Nurse's Examining Board is doing indirectly for the betterment of the smaller hospitals in the State, by their refusal to recognize nurses coming from hospitals that do not give certain standards of instruction to nurses.

Seventh. I referred to the Public Health Education that is being carried on through the University Extension Department of the University, through a burean in charge of the executive secretary of the Anti-Tuberculosis Association, Dr. H. E. Dearholt, of Milwaukee.

Eighth. The Engenic Law was only referred to with a passing remark that an appreciation and observance of the Sixth and Ninth Commandments would be probably more powerful for race betterment than this law. This bill was discussed at a later meeting of the committee by the secretary of our State Board of Health. Dr. Harper. The nuceting on the whole was a very interesting and enthusiastic one, and there can be no question at all that this annual meeting of these two committees of the A. M. A., calling into consultation with them as they do representatives from all the States, and leading educators from the various universities of the country, is having a very beneficial and far-reaching effect in the advancement and unification of medical education in the various states.

Yours very sincerely,

PRESIDENT: I do not know that this is the time or the place to read this communication of Dr. Bunting, but there was, as you know, a committee appointed for the investigation of cancer in Wisconsin. I have forgotten the personnel of the Committee, but Dr. Bunting was the chairman.

He has sent this communication to me, and I think I may as well read it now.

State Medical Society of Wisconsin:

Your Committee appointed to investigate cancer in Wisconsin begs to report:

The Committee was of the opinion that a statistical study of the condition in the state was necessary as a basis for any future work. With some labor it prepared a chart for recording cases by the members of the Society in practice. This chart, accompanied by letter of explanation and direction sheet, was mailed to each member of the Society at an expnese to the Society of approximately \$90.

The Committee has been much disappointed in the result of its effort to make a start at this work. Of the 1,750 letters sent out, but 70 charts have been returned; 55 with positive results, 7 with the cases recorded, and 8 "not in practice." Of the men who may be said to be the leading surgeons in the state, and who must see the greatest number of cases of cancer, but two have made report.

In the face of this indifference on the part of the practicing physicians of the state your Committee sees no way in which the study for which it was appointed can be carried out.

Respectfully submitted,

C. H. BUNTING, Chairman.

PRESIDENT: I do not know whether Dr. Bunting expects to make any supplementary report, but I suppose not, and that this is the final report.

If such be the case it is a pretty severe indictment of the 1750 members of the State Society, and indicates we are not tuking much interest in this all-important subject of cancer. This is not as it should be . In fact if we are to learn anything about the subject, it seems to me this direct local study by inteligent and watchful men, who appreciate the importance of care and accuracy in their observation, is fully as important as the work which is being attempted to be done by the Cancer Committee of the A. M. A. In fact, they must largely depend on the supplemental work of the state medical societies, where we are in more direct communication and conference with the individual members who have this work in hand, and it seems to me that we should awake to the importance of such matters, and do really scientific work, and

make scientific progress in this state of Wisconsin if we are going to be even abreast of the states about us in this kind of work.

If this is the only report to be presented, it is a pretty severe indictment of the Society.

That is all I have to report now.

Dr. Dodd, of the 11th District, is here, and we will now listen to his report.

The report of the councilor from the 11th District was presented by Dr. J. M. Dodd, of Ashland, as follows:

Dr. J. M. Dodd, Ashland. Mr. President, and Gentlemen: The 11th Councilor District has nothing special to report, except possibly a little falling off in membership, due in all probability to the inactivity of the councilor.

PRESIDENT: Quite likely.

DR. Dodd: The President will tell you that, and I wanted to get ahead of him.

There is not the spirit of go-ahead in the Medical Society work that I should like to see up there, and I have wondered if perhaps a more active councilor up in that district might not be able to accomplish more.

I want to compliment the present secretary for the systematic way in which he is keeping us in touch with the work going on in our various counties, and this monthly report is, I think, an excellent thing in keeping us in touch with the situation as we go along, and reminding us of things that need attention.

PRESIDENT: It is an excellent plan, Mr. Secretary.

Dr. Dodd: I want at this time to protest, as I have done before, against this meeting of the House of Delegates and the Council being held the night before the opening of the session. It imposes quite a hardship on those of us who are in the outskirts of the state, as we must either travel all day or lose a day and a night in order to get here to that first meeting. It seems to me there would be plenty of time on the morning of the first day to transact the business that is done the night before, and I think I voice the sentiment of quite a number of the members when I enter this protest against the preliminary meeting.

PRESIDENT: That is true, but I do not suppose, Doctor, that we should have time enough to do all of the work of the House of Delegates at this morning meeting; at least, we should have to shut off a good deal of our talk if we did that. Maybe it could be done, but I am afraid it would shorten things up too much, and we do not want to be hurried. This is the business body of the Society to transact all of its business, and we ought to he heard, and we ought to have one whole evening to diseuss matters, if we feel like discussing them, and have it for that purpose. I appreciate, however, what the Doctor says about the hardships involved on people

living so far away. Of course, it is a matter for the House of Delegates to consider.

DR. Dodd: It throws those who would like to participate in the proceedings of the House of Delegates all off balance to not be able to be here at the first session, because ordinarily the work of the House of Delegates is outlined at this first meeting, and those who come in at a later date are usually out of tune with the whole proceedings.

PRESIDENT: Well, that is true, but you can usually catch up the harmony and go on with the tune, just the same.

We have now heard from all of the councilor districts except the 3rd, Dr. Nye's. I think we are now ready for the report of the secretary, Dr. Sleyster.

The report of the secretary was presented by Dr. Rock Sleyster, Waupun, as follows:

### REPORT OF THE SECRETARY FOR 1914.

State Medical Society of Wisconsin:

The last fiscal year closed Dec. 31, 1913, with the usual 53 county societies—all of which sent in their annual reports. The total membership for the year was 1,743, as compared with 1,685 in 1912, a gain of 58, and the greatest membership by that number ever recorded in the history of the Society.

The incomplete report for the present year, 1914, follows, and you will bear in mind that three months remain for active work. Attached is a detailed statement showing 1913 and 1914 membership, loss or gain, number of delinquents, losses through death and removal, and number of new members for each county society, and for each councilor district. All societies reported promptly with one or two exceptions, and the majority of the county secretaries have given this office most efficient co-operation.

At this early date the following districts have failed to reach last year's membership—the 2d, 3d, 4th, 5th, 7th, 8th, 10th, 11th and 12th. The 1st and 6th show a gain and the 9th is the same as last year. The splendid showing of the 6th district deserves a word of praise for the councilor and county secretaries whose tireless efforts have resulted in a gain this early of 19. This district, with a membership of 201, has but two delinquents and 28 new members. Door County, which has been the despair of all who have worked for its organization, has been increased from 3 to 11 through the personal efforts of Dr. Abraham, the Councilor, and with one exception, every eligible man in the county is a member

Of the 53 societies, as compared with the totals for the twelve months of 1913, 16 show a gain, 29 a loss, and 8 are the same. The counties making the greatest gains are: Door, 8; Fond du Lac and Racine, 5: Jefferson and Chippewa, 4; Dodge, Winnebago and Portage, 3. Those showing the greatest loss are Milwaukee, 11; Barron-P-W-S-B, 7; Dane, 6. Eight counties are the same as last year. Nearly all of those showing a loss at this time have assured us that they will equal or pass last year's membership before the end of the year.

The counties having five or more new members are as follows: Milwaukee, 26; Racine and Door, 8; Jefferson, 7; Dodge, Rock, Grant, Brown-Kewaunee and Fond du Lae, 6; Walworth, Dane, Winnebago, Chippewa and Eau Claire, 5 each. The secretaries of the following counties should be placed on a roll of honor as having no delinquents: Jefferson, Waukesha, Green, Crawford, Door, Outagamie, Juneau, La Crosse, Monroe, Vernon, Lincoln, Marathon, Portage, Wood and Langlade.

The total membership on Dec. 31, 1913, was 1,743. On Oct. 6, 1914, it is 1,708, a loss of 35, but with 93 delinquents still to hear from and numerous applications on file in the various societies the secretary hopes to reach nearly 1,800, if not more, by the end of the year. During the year we have lost 100 through death and removals—far more than normal—and have gained 157 new members, a very creditable showing. Collections have been more difficult than usual because of the raise of one dollar in dues, but the membership in general, when the necessity was explained to them, have paid without complaint, and I believe the medical defense feature more popular than ever, notwithstanding it has doubled in cost.

During the year the secretary has asked each county society to furnish him with a list of all eligible and desirable non-members. The majority did so and an energetic "booster" eampaign was again waged with very satisfactory results. As near as can be judged from this office I would estimate that there are now less than 150 physicians in the state who are eligible and not affiliated. During the coming year every effort should be made to get the applications of these few who remain outside. In this connection I wish to read a communication from Dr. Craig, secretary of the A. M. A., and refer it to the House for action. The plan seems feasible and, safeguarded as it is, I can see no objection to it.

"Chicago, June 18, 1914.

"Dr. Rock Sleyster, See'y,
"State Medical Society of Wisconsin,
"Waupun, Wis.

"My Dear Doctor Sleyster:

"If the plan ontlined below appeals to you, will you kindly bring the subject to the attention of the Conneil of your State Society by mail, if possible, so that we may place at your disposal the services of a force of organizers at an early date. I find that it will be possible to send these men into Wisconsin during the middle or latter part of the summer, if the state association desires to cooperate. You will understand what I mean after you have read the outline of the plan under which we have been co-operating with other states. This is the plan:

"The American Medical Association will detail certain men who have developed special ability in organization work to make as thorough a canvass of the physicians of Wisconsin as is practicable. These men will act under the advice of the officers of your state association—the president, secretary and councilors, and will cooperate with the president and secretary of each of the

component county medical societies in whose district they are working. Their assignments will ordinarily be made from this office. As a rule, we send an organizer into a councilor district and if it is at all feasible, have him go directly to the county in which the councilor for that district resides, calling upon the councilor and asking him for his eo-operation, and also the secretary of that county society. Sometimes this is not feasible. Under these conditions, he reports to the secretary of the county medical society and enlists the co-operation of this officer. He is provided with a list of the physicians of the county as far as we are able to compile it in this office. The organizer also knows the record at this office with regard to membership in the State Medical Society of Wisconsin and the relationship of the individuals to the American Medical Association, either as Fellows or as subscribers to The Journal. He then checks the nonmembers with the assistance of the secretary of the county medical society and solicits those who are reported to him as eligible to membership in the county and state organizations. He does not solicit membership from other physicians unless it be at the instance of some member of the county medical society.

"In addition to this work, he is to increase the Fellowship in the American Medical Association in the county whenever possible, and is privileged to take subscriptions to The Journal from those who are not eligible to membership or Fellowship.

"For this work, we provide the organizer with a modest traveling allowance and pay him a nominal salary in addition to the commissions he receives for new business for *The Journal*. It is understood that the state medical association will pay to the organizer through this office the sum of \$1.00 for each member of the state association, who is elected to membership upon application taken by the organizer and placed in the hands of the secretary of the local society.

"If it is agreeable to you to have us assist the State Medical Society of Wisconsin in extending its endeavors through the efforts of these organizers, we shall be glad to send the men to you within the next few weeks.

"Your very excellent work in Wiscousin has undoubtedly brought most of the men into the county societies. Nevertheless, the personal touch here suggested may be just the thing needed to complement and to complete the work you have already done. At any rate, we shall be glad to co-operate with you in trying to reach your 2,000 mark.

"Looking forward to seeing you in Atlantic City, I am, "Very truly yours.

"ALEX. R. CRAIG, Secretary."

The past year has been unusually satisfactory both for the society and for the profession throughout the state. The county societies report with searcely an exception an increase in fraternal feeling and scientific interest. The state society is in splendid condition, and I know of none where such a feeling of fellowship without party or politics exists. In fraternal feeling I believe we have not an equal. Our membership is nearly complete. Our scientific programs are growing more and more valuable each year. The JOURNAL, under the

able management of Drs. Myers and McMahon, has more than maintained its high standards. Our medical defense continues to successfully defend our members when threatened with malpractice suits. All in all, we can be well satisfied, for the outlook is fair indeed.

One question I wish to bring to your attention before closing, and I ask that the House take it up for discussion. Many of the state societies have reached a time when it seemed that in this age of specialization it was advisable to divide the scientific program into general sessions and three section sessions—one for the branches of medicine, one for the branches of surgery, and one for eye, ear, nose and throat. During the past years those members of the state society specially interested in surgery, believing that the time allowed them for their specialty at the state meetings too limited, have organized a Surgical Society. Those interested in eye, ear, nose and throat work have done the same. The question arises-would not these organizations be stronger and more effective as sections of a parent organization of the strength of the State Medical Society; and would not the state society strengthen itself by allowing these men a section and keeping all regular medical activity in one compact body? The scheme of organized medicine in this country is the best the world has ever seen; it provides for the needs of surgeon, internist and specialist under one compact and powerful organization to which every member owes unswerving allegiance. Will not separate associations of the scope contemplated in these beginnings tend to weaken the State society, and are these men not entitled to a section at our general sessions? I believe this subject is of sufficient importance to warrant your careful consideration at this meeting.

During the past year your secretary reports that he has visited the sessions of two other state societies, has

attented two sessions of the Association of State Secretaries, and the annual session of the American Medical Association. These meetings have been an inspiration and we have gained some valuable ideas for improving our work. We ask your criticism and help in making the office of more real service to the members. In closing we wish to thank the county secretaries and members of the council especially, for the splendid co-operation they have given in helping us to carry on the work laid down by the very best secretary any medical organization has ever possessed.

Respectfully submitted.

ROCK SLEYSTER, Secretary,

Scenetary: There is one other point regarding prorating of dues,

Many county secretaries have written to me asking if, in the case of a man joining in October or November, it is fair to charge him for the whole year's dues. I notice that Ohio has taken the stand of pro-rating dues, and I think that after the first six months have elapsed. something should be done. For instance, a man joining at the middle of the year, would pay one-half, and a man joining in October would pay simply one-quarter of the dues. It seems rather unfair under the present arrangement, and while most of us would not hesitate to pay it, at the same time there are some country practitioners, and others as well, who hesitate to pay the full year's dues after eight or nine or ten months of the year have clapsed. It has been my own experience as county secretary that it is hard to get a man to join along toward the close of the year, and I would like to see the House of Delegates take some action in this matter.

### MEMBERSHIP REPORT-1914.

	1913 to Dec. 31	1914 to Dct. 6	Loss — Gain +	Deiln- quent	Deaths and Removals	New Members
1st district:—		1	1	!		
Dodge	31	34	+ 3	2	1	6
Jefferson	30	34	+ 4	0	2	7
Washington	16	14	_ 2	2	6	0
Wankesha	4.5	41	- 4	0	5	1
Total	122	123	+ 1	4	8	14
2ND DISTRICT:-						
Kenosha	38	35	- 3	2	1	0
Racine	33	38	+ 5	2	0	8
Walworth	30	26	-4	2	7	5
Total	101	99	_ 4	6	8	13
3rd district:			İ			
Dane	106	100	- 6	3	8	5
Columbia	30	29	j — 1	2	1	2
Green	20	19	— 1	0	1	0
Rock	57	56	<u> </u>	7	1	6
Sank	23	20	- 3	4	1	2
Total	236	224	12	16	12	15
4TH DISTRICT:-						
Crawford	11	10	- 1	0	1	0
Grant	46	46	0	1	5	6

	1913 to Dec. 3i	1914 to Oct. 6	Loss — Galn +	Delin- quent	Dealhs and Removals	New Membesr
lowa	10	12	+ 2	1	0	3
Lafayette	19	17	_ 2	1	1	U
Richland	15	13	<u> </u>	4 $ $	0	2
Total	101	98	<b>—</b> 3	7	7	11
5TH DISTRICT:—					1	
Calumet	16	15	- 1	1	0	0
Manitowoc	24	24	0	2	0	1
Sheboygan-Ozaukee	49	47	- 2	3	2	3
Total	89	86	<b>—</b> 3	6	2	4
6th district:—						
Brown-Kewaunee	37	39	+ 2	1	3	6
Door	3	11	+8	0	0	S
Outagamie	35	36	+1	0	2	3.
Fond du Lac	46	51	+ 5	1	0	G
Winnebago	61	64	+ 3	0	2	5
Total	182	201	+19	2	7	28
7TH DISTRICT:—			İ			
Juneau	10	12	+ 2	0	0	2
La Crosse	35	36	+ 1	0	2	3
Monroe	23	19	— 4	0	4	0
Trempealeau-Jackson-Buffalo	26	24	— 2	1	3	2
Vernon	11	11	0	0	1	1
Total	105	102	— 3	1	10	8
8th district:—	'					
Marinette-Florence	29	27		1	2	1
Oconto	11	7	4	4	0	0
Shawano	20	19	— 1	1	1	1
Total	60	53	— 7	6	3	2
9th district:—	00	1		) 		_
Clark	. 19	1 18	1	1	0	0
Green Lake-Waushara-Adams	27	28	+ 1	1	1 1	3
Lincoln	10	1 11	+ 1	1 0 1	0	1
Marathon	37	37	0	1 0	1	1
	19	22	1 + 3	0   0	0	3
Portage	29	25	T 3   — 4	''   1	4	1
Waupaca	22	22	- 4	1 0	3	3
Total	163	1 163	0	0   3	9   9	12
10th district:—	100	1 100	1	• • • • • • • • • • • • • • • • • • •	.,	14
Barron-P W-S-Burnett	39	   32	7	l 1 2	7	2
		$\begin{vmatrix} & 52 \\ 1 & 21 \end{vmatrix}$	- 7	ļ - 2 l 1	0	5
Chippewa	17		+4	!		1
Dunn-Pepin	18	17	— 1		0	0
Eau Claire	36	37	+ 1	1	3	5
Pierce	14	14	0		1	2
Rusk	10	8	— 2	1	1	0
St. Croix	18	18	0		1	2
Total	152	147	_ 5	8	13	16
llth district:→						
Ashland-Bayfield-Iron	26	22	— <del>1</del>	6	1	3
Douglas	35	35	0	1	0	1
Langlade	15	13	1 — 2	0	4	2
Oneida-Forest-Vilas	15	12	- 3	3	1	1
Price-Taylor	11	10	— l	2	0	1
Total	102	92	<del>-10</del>	12	6	S
12th district;—						
Milwaukoe	331	320	-11	21	15	26
Total	331	320	<u> </u>	21	15	26
	1743	1708	35	93	100	157

MEMBERSHIP	PEROPT PV	DISTRICTS
MEMBERSHIP	$\mathbf{p}_{\mathbf{p}}$	THOURIUS

DISTRICT .OCIETY.	1913 to Dec. 31	1914 to Oct. 6	Loss or Gain	Delin- quent	Deaths and Re- movals	New Members
First	122	   123	+1	4	8	14
Second	101	99	_ 2	6	8	13
Third	236	224	12	16	12	15
Fourth	101	98	- 3	7	7	11
Fifth	89	86	3	6	2	4
Sixth	182	201	+19	2	7	28
Seventh	105	102	3	1	10	8
Eighth	60	53	— 7	6	3	2
Ninth	163	163	0	3	9	12
Tenth	152	147	5	8	13	16
Eleventh	102	92	10	12	6	8
Twelfth	331	320	11	21	15	26
Total	1743	1708		93	100	157
Total	1145	1100	50	99	100	191

PRESIDENT: Gentlemen, you have heard the splendid report of Secretary Sleyster, which has my unqualified admiration and endorsement. What is your pleasure?

Motion made to adopt the report as read, unanimously carried.

PRESIDENT: There are certain recommendations here which I think we will take up a little later. Perhaps we had better attend to the other business first.

Now comes the election of delegates and alternates to the A. M. A., to succeed Drs. J. J. McGovern and Rock Sleyster, Delegates, and F. T. Nye and W. T. Murphy, Alternates. I think the House of Delegates might as well make these appointments now.

As you know, the next meeting of the American Medical Association is in San Francisco in the first part of June, and it is desirable that in making these appointments we should secure men who will certainly go. We want to be represented. It is an important meeting, and it is the only business meeting for the transaction of the business of all of the physicians of this country, that is, all of the members of the American Medical Association, some 70,000, and we want good material, and men who will be there and understand the wants of the profession locally and generally. I do not think the Committee on Nominations have usually reported these; I think they have been nominated from the floor. Of course the House could take action and refer it to that Committee, if you chose

to do so. But I do deprecate the procedure which often takes place, of having anybody nominated haphazard, and somebody moving that the secretary make it unanimous and cast the ballot of the Association without previous consultation or deliberation in regard to the matter. I think the matter should be carefully considered, and sufficiently so that we are sure of getting as good a delegate as we can. I will await action of the House of Delegates on this matter. How shall we elect these delegates? Has anyone any wisdom?

Dr. J. M. Dodd, Ashland: I move that it be referred to the Committee on Nominations.

Motion put and carried.

PRESIDENT: It is hereby referred to the Committee on Nominations, and they will meet right after this meeting adjourns.

Dr. W. F. ZIERATH, Sheboygan: They simply make the nominations to the House?

PRESIDENT: They make the nominations to the House, and the House can make different selections if they see fit. But it does give an opportunity for consultation and more careful selection.

The next order of business is the election of councilors of the 7th and 8th Districts, to succeed Dr. Edward Evans, of the 7th District, and Dr. T. J. Redelings, of the 8th District. What action do you take, Gentlemen?

Dr. Currens: I move that it is the sense of this meeting that the secretary cast the unanimous ballot for these gentlemen for re-election as councilors of their respective districts.

PRESIDENT: You wish both of the councilors to be voted at the same time?

Dr. Currens: Both. Motion seconded.

Dr. T. J. Redelings, Marinette: Mr. President-

PRESIDENT: The gentleman is not in order. Are there any remarks on this question, aside from Dr. Redelings? If not all those in favor of the motion will signify it by saying "aye"; opposed saying "no".

Motion carried unanimously.

President: These two gentlemen are re-elected. A very proper action on your part.

Dr. G. Windesheim, Kenosha: I have an idea that the Chair misunderstood Dr. Redelings when he got up. Dr. Redelings wanted to thank the Society for the compliment, and to state that he was willing to serve for the next six years.

PRESIDENT: I certainly was under a misapprehension, and I beg the gentleman's pardon; and we certainly reciprocate the kindly feeling which he has expressed towards the Society in honoring him in this way, and we trust that his previous good conduct and efficient services will be continued in the future. You are entirely welcome. Doctor, don't feel yourself under any obligation at all in this matter.

The rest of the program, the election of committees and delegates has been mixed. Sometimes the House of Delegates has appointed them, but for the last year or two the Committee on Nominations has suggested them.

As to this Committee on Public Policy and Legislation, ordinarily when it has been appointed by the House it has been *pro forma*, that is, somebody has gotten up and moved that the previous delegates be elected, and that is about all it has amounted to.

It will be in order for someone to move that the appointment of these other committees, the Committee on Public Policy and Legislation, the Committee on Prevention of Tuberculosis, the Committee on Medical Education, the Committee on Neerology, the Committee to act with the Board of Public Instruction A. M. A., the Delegates to the National Legislative Council, A. M. A., and

the Delegate to the Council on Medical Education, A. M. A., be referred to the Committee on Nominations. Do I hear such a motion?

Dr. Gilbert, Madison: I make the motion, Mr. President, that it be so referred.

Motion put and carried.

PRESIDENT: The Committee will make those nominations and report at the proper time.

The secretary has a communication which I received from the Cancer Committee of the A. M. A.

Communication read by Secretary Sleyster.

PRESIDENT: You understand the purport of this communication. It is to co-operate in a national investigation of cancer undertaken by the A. M. A. and requests that we appoint an official representative of this Society to act in conjunction with this Committee.

A motion to refer this letter to the Nominating Committee would be in order, unless you wish to nominate from the floor a member of this National Committee.

Dr. T. H. Hay, Stevens Point: I would nominate Dr. L. M. Warfield of Milwaukee, as the representative of this Society on that Committee.

Motion put and unanimously carried.

PRESIDENT: This completes up to the present the reports that are here to be made, and it is in order to take up any new business, or any suggestions made by the secretary.

Dr. W. F. Zierath, Sheboygan: Under the matter of new business I would like to take up the subject of the Committee on Public Policy and Legislation. It seems to me, in view of the fact that the medical profession to-day has such aggressive enemies along lines of legislation, who are working in the legislative field, that the present Committee on Public Policy and Legislation istoo small; that its functions are not broad enough; and that it possibly has not enough resources towork with properly. Last year the Christian Scientists of the State of Wisconsin went down tothe state legislature and practically blocked every bit of legislation that the State Medical Society wanted. I think that this is a matter that should be opened up for a broad and free discussion. It is very important. The Christian Scientists and the League for Medical Freedom, the chiropractors and the osteopaths, and all the other cults, are very

energetic, but we have not a representation before the state legislature in proportion to our importance to the state of Wisconsin. A great deal of this is due to the inactivity of the individual physician.

When I was secretary of my County Medical Society, and received letters from the Committee on Public Policy and Legislation urging the Secretary to go around and talk to the men, there seemed to be a lack of ambition and interest in the matter. This, it seems to me, was due to the fact that the members of the profession were not informed as to what was going on in the state legislature. When a law was passed there were plenty of kicks, men would come around and say, "Why did not the State Medical Society do something?" The invariable answer was, "Why did you not do something, I spoke to you about it."

There should be some method of getting the men posted on the various things that are going on in our state legislature, and having some action that is uniform and effective. If we were to go to the legislature of the state of Wisconsin in as large a force, and with as much enthusiasm and vigor as the Christian Scientists, we could dominate the situation.

PRESIDENT: No doubt of that.

DR. ZIERATH: But we are not doing anything in proportion to our opportunities and our responsibilities. We are the guardians of the health of the public of the state of Wisconsin, and we are not exercising that function; and in so far as we do not exercise it we deserve the condemnation of the people, and we deserve the odium and the interference that these laws produce in our practice.

I have arisen and talked about the matter merely to open up the subject. It seems to me that it is very important and has been too lightly passed over in the past.

Dr. Adams: Gentlemen, if we are interested in legislation in this state, it seems to me that the way to bring about results is to get close to the men who make our laws. When in our city we were discussing the proposition of the reorganization of our Health Board, which finally resulted in the installation of a paid health officer, the matter was brought up before a church elub that I belong to, and it was suggested that a petition be circulated and presented to our common council. That proposition was opposed, and this was substituted; that every member of that club see the individual councilman in their district, and say to

him, this is a good thing, we want you to vote for it. Now if the members of the medical profession of the state of Wisconsin will individually see the representative in the legislature from their district and sit down and talk with him, that is the best thing you can do.

But let me tell you something better, if you can and will do it, along the line of organization work. Let every county medical society in the state invite your legislative representative to meet you and take up and then and there discuss with him, before you as a body, matters that are likely to come up in the legislature at Madison. acquainted with your representative. Make a personal appeal to him. Know what you want, and tell him that it is a good thing. Then keep in touch with him, and when something is up before the legislature, again invite him in. You may be sure he will come. He wants your votes by and by. And if he does not come, get after him and tell him if he does not come you will let him hear from you later on. Get him before you as a body. We cannot give up our time, and we eannot go to Madison. I have tried it. I went to Madison to appear before a legislative committee. How much time did I have? I did not have two minutes. The time was taken up by the opposition. The chairman looked at his watch and said "Gentlemen, I am sorry, but our time has expired." I have paid my money, and taken my time, to no avail. If you can get the members of the legislature, of the lower house and the senate, to meet you as a body, call a special meeting, and call a special council or meeting, and hammer him then and there, and point your finger at him and say, "Now what are you going to do, are you going to fight us?" "When you are sick, or when your family is sick you need us, and you use us, are you going to kill us?" It seems to me that that is the way to play politics. I have played the game; I know what it means. We are primarily physicians; I think that primarily we ought to be good citizens; and if we are good citizens of the state of Wisconsin we ought to help our legislators to know what kind of laws they ought to pass. (Applause.)

PRESIDENT: We might perhaps be talking more definitely to some motion or action of the Society, but we will listen to Dr. Currens.

DR. J. R. CURRENS, Two Rivers: I have had a little experience in medical legislation. I have hobbied through four bills. At the time that our

Board was first organized we had a law as I have mentioned before to some of you, that you could throw a cow through by the tail and not hurt the cow nor the law. But it was a start, and we had to patch on and patch on.

The suggestion and plan of Dr. Adams, who has just preceded me, is very nice, but in the first place it is a pretty hard matter to get a county society together. This state was organized once, and it was very active too, but it took about five years to get them worked up to the organization pitch. We got up a fight, or a succession of fights, and they were all interested. You have got to do something to stir up the rank and file of the profession and get them to take hold of the matter. As I said before, we had them at one time in this state, the time the bill came up to try and get a Health officer appointed to the Panama Canal. We called a referendum on President Roosevelt and there was over 80 letters went in inside of 24 hours to the President from this state, and the same number of telegrams, and also letters to our representatives in Congress and the Senate. In order to do those things it takes work and it takes organization, and time to do individual work. It is not everybody that can approach a legislator and get his vote. Dr. Hav, for instance, could get a vote that I could not get; he could present the matter in a way that I could not do. It is an individual matter, sitting down there day after day: I have put in as many days as any individual here, I think, in medical legislative work; and very often I have put in nearly a whole week at a time before persons who would not listen to me. I have gone to a single session of the legislature as much as ten or twelve times. It is the constant dripping of water on a stone that wears it away. These legislators are there with their own prejudices, and the prejudices of their friends. At the time they had the proposition of the Osteopath Board before us. they had the thing as strong as Gibraltar, and we could not break it. We would send an army out from Milwaukee and batter away at them, and fall back. They had their lady lobbyists there, and their individual lobbyists, and they had the place honeycombed with osteopaths so it seemed almost impossible to avoid having two Boards in this state. But by perseverance, and going out singlehanded or two or three in a bunch, and keeping at it, we got a compromise bill. You have these punch doctors, the chiropractors and the osteopaths, and there is a big army of them to fight, but the Christian Scientists are the hardest ones of all to beat, because they appeal to the religious element. The people that perhaps do not believe in them think they are good people, and that they should not be sat on too hard, but let down easy. I was often considered too heavy a man for the job. Now begin at home, as the idea was suggested, if you can only get your legislators before your county societies it can be accomplished, but you have got to do it where you have a city of some size, because it would be impossible to get a representative out in the smaller places.

(Applause.)

PRESIDENT: Is there any motion now? We could continue this discussion indefinitely, without some definite plan. I will call on Dr. Zierath.

Dr. W. F. Zierath: The idea of bringing up this discussion was simply to bring out the point that we need the co-operation of every individual in the State Medical Society. This Committee probably has not the powers that they could ntilize to the best advantage, and I do not know what the Nominating Committee is going to do. But in any event I would make this motion, or something to that effect, that the matter of enlarging this Committee and giving it greater resources and greater powers be referred to the council. A few men can manage this matter better than the entire House of Delegates. I move that the modification of the Committee, and the power to give it increased resources be referred to the Council of the State Medical Society, to do with it as they see fit.

Dr. Currens: I second the motion.

PRESIDENT: The matter of enlarging the powers and increasing the number of this Committee on Public Policy and Legislation be referred to the Council. Dr. Wilkinson, any remarks?

Dr. M. R. Wilkinson, Oconomowoe: I would like to state that in many of these important matters the difficulty that the councilor meets is this, to control or educate the members of the profession, as councilor. It seems to me that the way in which to reach most of our men is in public meetings, and that this matter, instead of being referred to a smaller committee should be taken up by the entire meeting of the house. If you can get the entire body of those present to discuss this matter, you will accomplish more good than a dozen councilors can in hammering away at them through the mail or otherwise. In that way you get them

directly interested in the matter. I think it would be well worth while to discuss this in its entirety with all members present.

PRESIDENT: Of course, as you know, one of the prime objects and purposes of this new plan of organization was to facilitate the action of the whole body individually and collectively in just such work as this, to use our influence as a whole body to secure such laws and legislation and such action on the part of public bodies as we are capable of producing, if we will but act in unity, in harmony, and unitedly as a body. That we have not done this heretofore in spite of the fact that our attention has been frequently called to the subject, is simply because we have not been educated up to the point of acting together, or else we have not had sufficient interest in these matters to act together. But as has been said, if we are in earnest in pushing forward the best interests of the medical profession we will use the power which this plan of organization has placed in our hands. We have here a graded system of medical societies, beginning with our units, our county societies with their secretaries, our 53 secretaries in this state, our 12 councilors, then our state organizations, and the capsheaf, the American Medical Association; we have all the machinery for the utmost publicity for any measure that we have to advocate, or that we wish to advocate, and, like anything in this world all that we need to do is simply to do it. And whether enlarging the committee, or giving it more money, will do it, is a question. We have got to awake, as individuals and as members of the Society, to action along these lines. As I have said, we can do it, and we have the power, if we so will.

Dr. G. Windesheim, Kenosha: Our constitution provides that every county medical society, or the president of every county medical society, shall appoint every year a Committee on Public Health and Legislation. It was intended that that committee should be kept in touch with all of the work that the committee of the State Society on Public Policy and Legislation was doing, and that that committee of every county medical society should see to it, or use its efforts to have the legislators and the people generally instructed in regard to the laws or bills that come before the legislature. It seems to me that the fault lies with the county societies in not selecting men or members of the Committee on Public Health and Legislation

that are interested in the work. If the presidents of the various county societies were instructed to select only such men on that committee that they knew to be interested in the work and would spend the time and energy to enhance the work of the Committee on Medical Legislation, it would help a great deal. I know from experience in my district that these committees are sometimes not appointed. One year in our county they were not appointed at all, and some question came up on public health and legislation, and the question was asked, who is your committee? the reply was, "I do not know, I guess they were not appointed." The fault lies primarily with the councilors, perhaps, in not instructing the presidents and secretaries of the various county societies in regard to the importance of having that committee a good committee, and, secondarily, with the presidents and secretaries of the county societies in not seeing to it that that Committee on Public Health and Legislation are active men who will do the work.

Dr. A. W. Myers, Milwaukee: It seems to me that one of the greatest difficulties in dealing with this proposition is that we do not know what we are dealing with in the first place, because we do not know until the legislation is introduced what we are up against; that is the great trouble. There are, of course, some things that we can plan for in advance. There are a few policies that the State Medical Society should stand for. But the great majority of the bills that affect us one way or another we do not know about beforehand, and it is not easy for the county secretaries or county committees, or even for the councilors, to keep in touch with the legislation at Madison. It is a very hard thing to keep track of the bills that do affect the medical profession in one way or another. I do not see how the present Committee on Public Policy and Legislation can be expected to do much more work than they are doing, with the present number. It seems to me that the suggestion of Dr. Zierath that the council be instructed to take up this matter, with the idea, perhaps, of enlarging the Committee, might have a good effect, because if a Committee of sufficient size to divide up the work eould be devised so that they could keep in touch with the legislation, and send out bulletins to the county secretaries of what is going on, then I think something could be done at the time that it ought to be done. Under the present method we do not know what is being done until after it is all over,

and there is no chance to do any work. If some means could be devised to keep the different societies in touch with the legislation that is being proposed, at the time it is being proposed, I feel that we might be able to do some work. At present, unless some such matter perhaps as the Medical Practice Act, or something of that nature, is up for consideration, we do not know anything about it until it is all settled. The great majority of the bills that were submitted at the last legislature were bills that we did not know anything about until everything was over. Take, for instance, the Eugenie Marriage Bill. We hardly heard of it until after it was passed and ready to go into effect. The trouble is that we do not get our machinery started until everything is all settled. And I do not see how we can do anything unless information is sent out in advance. If in some way the Journal can be used to diffuse that information, I would be glad to do it. But the editor eannot be out at Madison; the information must be sent to him before it can get into the pages of the Journal. It seems to me that if the Committee on Public Policy and Legislation could be increased in size so as to enable it to digest the medical bills and tell us what is going on, and what the right and wrong of the situation is, it might be possible for us to get our machinery working and get some pressure to bear before the bills are finally acted upon.

Dr. H. E. Dearholt, Milwaukee: I am entirely in aecord with what Dr. Myers has said in pointing out the necessity of the legislative and public policy committee knowing what is going on. I am eertain, however, that the best way to increase their ignorance will be to appoint more members of the committee. I think that a committee of three people, one of whom is siek in bed, and another in Europe, leaving one man to do all the work, is the best kind of a committee. Our experience has been invariably that the medical members of the Legislative Committee have been the least interested members of that committee. I should think that the best thing we could do would be to either put this job on some paid officer of the Association. somebody who is now being paid, or create a small fee position and hold the individual who collects this small fee, accountable for informing us as to what is going on.

PRESIDENT: Individual what?

Dr. Dearholt: Some individual committee

man or officer of the Association. We have had a great deal of experience in legislation in the Anti-Tuberculosis Association and we succeed best when some individual is charged with finding out what is going on in the legislature. They can find out more in a day than a committee will find out in three months.

There is one consideration about this Christian

Science and ether agitation before the legislature.

Their strength does not come solely because of their numbers. The numbers of course are very important. But their numbers are multiplied by the fact that, as last year, when 200 of our Christian Scientists went out there, probably not more than half a dozen of them were paid healers. The others went out not with any commercial interest whatever, but because they believed in it. If this Society wants to be looked upon with favor before the legislature, it does not need more doctors going out there; it needs more patients going out there. More people who have no commercial interest whatsoever in this or that kind of legislation, but who are going out there because they say we want, as patients, good physicians; we do not want, as patients, to be subjected to the maltreatment of this or that quaek, and that sort of thing. A half dozen patients, in my estimation, will accomplish more than fifty doctors would, because the latter are under suspicion. The members of the legislature are used only to seeing one class of lobbyists, and those are the ones representing some commercial interest, and they respect those better than they do us, and think they are honest. When we go before the legislature and say that we are altruistic and disinterested, they eannot understand it; and they suspect us. It seems to me that we need to be frank on the one hand, and tell them just what we are after, if we are after something for onrselves; and on the other hand, when we are looking after the good of the patients, let the patients do it instead of us doing it. Let us put our efforts into having the patients go out there, and the general public, and demand things for us.

DR. J. R. CURRENS. Two Rivers: The trouble is to find some one willing to go there. The one idea is to have somebody watch them. Why not have an attorney hired by the State Board of Medical Examiners. There is no attorney in this state better qualified or who has a better insight into our medical laws and medical legislation than attorney Umbreit. Let him go out there every so often and

look over the bills that are introduced. That part is good. But the thing is to get them interested at home to go out there, to get the people. It has got to come from the people, as I said before. When we took up the last bill, in 1905, in regard to these advertising quacks and specialists of women, and Tansy Pills, and such things as that, we had the people educated; they were all alive to the situation, and outsiders began to become interested. Before that it was a fight. Now they have gone to sleep, and they need waking up again. We have to get busy in our towns and counties and get the doctors interested. I know we are all busy at home, and it is pretty hard to break loose. They think they will do it to-morrow, but when to-morrow eomes it is put away on the desk and forgotten. Their attention has got to be called to it every little while or there will be nothing done.

Dr. L. M. Warfield, Milwaukee: We have never had in this Society a Publicity Committee for the state, have we?

PRESIDENT: No. not a State Publicity Committee.

Dr. Warfield: Similar to a Press Agent Committee.

PRESIDENT: No.

Dr. Warfield: It seems to me that in this discussion on a matter of education, that we are just a little behind every other organization that I know of in disseminating knowledge about ourselves.

PRESIDENT: Quite likely. We are modest.

Dr. Currens: That is medical ethics.

Dr. Warfield: We are held back, possibly, by hiding behind medical ethics, which, after all, is nothing more than common garden honesty, if you boil it down. You can do a great many things in the present day and generation that might not have been in accord with medical ethics fifty years ago. Possibly then it would not have been the right thing to pass information to the newspapers, but it seems to me that a Publicity Committee of the State Medical Society of Wisconsin could conduct a publicity campaign in the newspapers, the articles signed by that committee, and still be free from all reproach in regard to non-ethical conduct. In that way we could disseminate the kind of knowledge that we want to. We cannot stand back and

say "Oh, well, we are just a little better than you fellows; don't you see that we are? We are a fine bunch, all right;" and let it end there. We get together in our meetings and talk about what fine fellows we are, and what we have got to do, and that ends it, and we come back another year and do the same thing. And so it goes on from year to year. It would seem a far better plan if you had a man whom the Society would be willing to pay to conduct a publicity campaign, and tell the people what we are trying to do.

The time has come when we have got to change our tactics if we are going to accomplish anything in the state of Wisconsin, and in order to bring the matter to a head, I will make a motion.

PRESIDENT: There is a motion before the house, Doctor. The motion was put.

Dr. Warfield: I will wait and make a motion after this matter has been disposed of.

PRESIDENT: The motion is that the enlargement of the Committee on Public Policy and Legislation, or the enlargement of its scope, should be referred to the council. That was the motion, I believe, of Dr. Zierath, and we are talking to that question, and please confine yourself to that question as closely as possible because our time is passing.

Dr. Adams: I thoroughly agree with all that Dr. Warfield and Dr. Currens and Dr. Myers have said. Dr. Myers wants to know what is going on in the legislature. Why doesn't he ask the members of the legislature from Milwaukee? Why doesn't he get in touch with one or two or more, and make personal friends of them, and see that he either calls on them and finds out what is going on, or that they come and see him. All that Dr. Currens has said is fine. Let that go on.

If the County Society wants to know what is going on in the legislature, why not ask your representative that question? We have in our County Society a business meeting once a year, at which we do not discuss medical matters; we discuss how to run our business legally. We usually have this meeting in January. The legislature convenes in January. Why not have the February meeting devoted to legislation and state laws, etc. Why not make an appointment with our assemblyman, and if possible, our senator, for some definite day, and have him come before the Society? Let the state secretary, or the chairman of the Legislative Com-

mittee, arrange with each county Society to have a special meeting covering this subject, and get your man in there and get acquainted with him. He will find out you are a pretty good fellow, and you will find that he is a pretty good fellow, and when you once know him, make an impression on him so he will know you again, and if you write a letter to him, or telephone him or telegraph him he will know that you are after him. Have him tell you what the legislature is trying to do. And in the meantime have the Public Policy Committee inform your county secretary what is pending, and talk it over with him, and ask him what is being done up there. If you are going to get anything, go to the source and headquarters, or have him come and tell you. The only way to play polities is to play it.

Dr. Warfield: I call for the question, and at the same time I would like to affirm what Dr. Wilkinson has said. I think he is correct in his point on this matter of referring everything to the council. It seems to me we should, as delegates, settle this question here on the floor of the house.

PRESIDENT: The motion before you, gentlemen, is that this question referring to the Committee on Public Policy and Legislation be referred to the council for discussion and further action. Are there any further remarks?

Dr. Currens: I understood that to be that they should have authority to appoint such help as they considered necessary. Was there not something of that kind?

PRESIDENT: It was at their discretion, according to the motion as I understood it, of Dr. Zierath.

Dr. Zierath: The idea of my motion is to bring this thing to a point. We have talked about it for years, and nothing has been accomplished, and we are not living up to our opportunities in this respect. Everything that the gentlemen have said, is all right. My motion was presumed to be so broad as to cover all these things. That committee will get out and unify all these efforts so they will be systematic, and something will be accomplished. The question is too big, broad and comprehensive to discuss in a meeting like this, it would take too much time, and there would be too great diversity of opinion. This committee would have power to go to work and unify all these elements, so that something would be accomplished.

PRESIDENT: According to the vote it will be referred to the council.

DR. WARFIELD: I would like to make a motion that the House of Delegates appoint a Publicity Committee of three members, the object being chiefly to disseminate throughout the press of the state, matters referring to public legislation and public hygiene, and questions concerning the medical profession of the state of Wisconsin.

Motion seconded.

PRESIDENT: You have heard the motion that a Publicity Committee of 3 be appointed to keep the profession and the public informed, through the newspapers and other means, as to matters connected with the state of the medical profession in Wisconsin. Are there any remarks?

Dr. Zieratii: That will conflict with this other motion, in enlarging the powers of that Committee on Public Policy and Legislation that will be appointed. If they saw fit, and they probably would, to bring about this publicity feature of medical legislation, they would do so. That really conflicts with the previous motion. I do not think that ought to be carried.

PRESIDENT: Are there any other remarks? If not, all in favor of Dr. Warfield's motion that this Publicity Committee be appointed by the House of Delegates will signify by saying aye; opposed, no.

It is carried.

PRESIDENT: If there is no objection we will refer the appointment of this committee to the Committee on Nominations, and the committee will take due notice.

PRESIDENT: In electing Dr. Warfield as Delegate to the Cancer Committee of the American Medical Association, no Alternate was selected. I think it would be proper that we should select one, as my attention has been called to it.

Dr. L. M. Warfield: I nominate Dr. Bunting, of Madison.

Carried unanimously.

PRESIDENT: Dr. Bunting is elected as the Alternate.

PRESIDENT: We are now ready to discuss some other topic. If you wish to take up the question of division into sections this is the proper time to talk about it.

This question is an old one, and has come up in one form or another to my knowledge almost every year for 15 or 20 years. Even when the Society had no more than 300 or 400 members, there were some who thought that we could hear a large number of papers and interest a large number in the program, and perhaps do more effective work if we were divided into sections.

When the Society was smaller, it was felt that the solidarity, the unity of action, the enthusiasm and the *esprit de corps* would be better affected by holding the members together during the whole of the session, and that is true. So there are things in favor of both of these plans. But as the Society grows larger there are some advantages to the other plan.

When I became secretary in 1890 we had but 300 members; now we have 1,800 members, six times as many as then. Of course the conditions are changed, and we can forego, perhaps, with advantage, some of the benefits of all meeting together, in view of the larger numbers that we are now dealing with. It is certainly entirely proper to consider the feasibility and desirability of having different sections if the House of Delegates sees fit to do so, and it is now before you. I should like to hear from Dr. Evans, of La Crosse, on that point.

Dr. Edward Evans, of La Crosse: You are asking me to bare my guns before I am prepared. I intended to speak about this later to-day. Nearly ten years ago, when I had charge of the program before, I advocated the dividing of the Society into sections.

Dr. A. J. Patek, Milwaukee: Mr. President and Gentlemen: I feel very strongly the desirability of organizing into sections, that is, the desirability of having any societies that are organized in the State become sections of this Society. The eye, nose and throat specialists are to meet to-morrow, and while they have organized independently, I believe it is their intention to become a section of this Society, governed by their own officers and having their own rules and regulations. I also feel that inasmuch as a surgical society has been organized in this state, a division of forces of that character is undesirable. It does away to a certain extent with the solidarity of which the President spoke. It would crystallize things more satisfac-

torily if all state-wide medical societies can be under one head,

I should very much like to see the Surgical Society of this state become the Surgical Section of this Society, under a plan somewhat as follows: have it called, we will say, The State Surgical Association, Surgical Section of the State Medical Society; let it retain its organization as at the present time, have its own officers, and be in no way subject to the call of this Society, nor subject to its rules. This Society, I believe, was organized as a sort of a protest—a protest against programs which included comparatively little surgical work. Our programs have been rather comprehensive, and have covered various fields of medical endeavor. Formerly, if I remember correctly, they were largely made up of perhaps a majority of articles bearing upon surgery, and the rest divided equally between medical and special subjects.

This Surgical Society can be organized into a Surgical Section of this State Society, can have its own officers and its own policy, its own fees, and can meet when and where it pleases. It may not always be satisfactory to meet at the annual meeting of the State Society. The Society may meet in summer, or possibly in some city in which the clinical material is not large. But if the Surgical Association organizes and meets where and when it chooses, not necessarily at the time of our annual meeting, there will be no intereference at all with its activity, but it will be the surgical section of the State Society, and yet have its own independent organization.

I think this Society will become stronger, and not weaker through additions of this character, and these offsprings will redound to the advantage of the State Society rather than by a division of energy and labor, interfere with its activity.

Dr. Dewire: Dr. Patek has given one view, which evidently comes pretty close to the surgeon's view, of the division of the State Medical Society. This State Society has not been the society of any one sect or division, but the society of all the doctors in the state. It is a meeting place to which the majority of us look forward to the time when we can get pointers, not only in medicine, but in surgery and every other question that comes up to the doctor. I should be very sorry indeed to see anything done that would have a tendency to split up this Society or divide up the attendance. If the Society is split up and the surgeons have their

Society under the name of the State Medical Society and attend their meetings, and the medical men attend their meetings, where does the general practitioner come in? He comprises perhaps 40 to 60% of the State Medical Society, and pays its dues, and helps to keep up the State Medical Society, and where does he come in? We eannot attend the meeting of the Surgical Section held along in the winter time, and that of the Medical Society held in the fall, and of the Eye and Ear Society held in the summer, and seattered all over the state. If we do a thing of that kind we are going to divide our forces, and when we divide them we are doing something that will injure our general society. If the surgeons want a society, let them organize. It will be a good deal as the National Surgical Society that was organized last summer, and about which there is a good deal of feeling among the general profession. It looks a great deal as though it was a society organized not only to help themselves and boost themselves along, but to ereate good big fees, and whether they know it or not, there is a good deal of feeling among the general profession all over the state in regard to that Society. We do not want anything of that kind to come up in the State Medical Society. It is one of the best medieal societies in the United States and has been for a good many years, let us keep it so.

Dr. Stalker: I heartily coincide with what the last gentleman has said. There is a great feeling in this state, and everywhere else, and if the surgeons want to withdraw and have a society by themselves and king it over everything, and arrange everything in their line, and if they do not think they are getting what they ought to have, and want the lion's share in every thing, let them go. I believe the secret of the strength of the State Society is its unity, and all working together. We cannot divide up and have different meetings.

The surgeons have an equal show in the management of this Society, and they have an equal show in getting the papers arranged, and ought not to be dissatisfied. They have their National Society. Why not be satisfied with that? If they have the time to go to society meetings, let them go out of the state to some other place. If we are going to have a state society that is worth anything and is going to be for the general practitioner and everybody else, it has got to be united. That is my idea.

Dr. A. W. Myers, Milwaukee: In some states this situation has been dealt with by dividing up the sections, but having the entire Society meeting at one time and in one place. By having four sessions as we have now, two of the sessions could be general sessions where everybody would get together, and during the other two sessions special groups or sections could be allowed to meet, such as surgery or medicine, or eye, ear, nose and throat. In that way the whole Society would meet at one time and yet part of the time would be spent in groups.

As you look over the programs of the last few years, you will see that rather more than half of the papers have always been surgical papers. So I do not think the surgeons have any reason to complain. I think the eve, ear, nose and throat men have had the most complaint. But I think you will find from the program committees that there are not very many people applying for space on the program who have to be refused. It does not very often happen that you have more material than you can get into the four general sessions, so that I really do not think it is necessary to split up to any great extent, if you are going to split up at all. As a matter of fact, I think that in the last three or four years there has been very little material offered that has not been used by the program committee. There has not been any over-crowding. Some of the eve, ear, mose and throat men have said that they did not get a chance on the program, but I think it is simply because they did not apply for space. As far as I know there have been very few papers that have not been given a hearing when it was desired to present them.

Dr. L. M. Warfield, Milwankee: The point that Dr. Myers brought up is a very good one, in regard to the question of program making. As one program maker, I can say with great feeling the difficulty of getting programs is not that you are swamped with material; you have got to get on your knees almost, and beg people to come and read papers before you. You have actually got to plead and work with them in order to get the papers, so it does not seem to me that there is anything in the argument that there are so many papers, and the space is so crowded that a surgical section has been needed. The experience of those who are making the programs disposes of that argument at once.

The question of whether or not it is advisable

to divide the Society into sections is an entirely different question, and should be separated from the other question of program-making. It seems to me that we should talk simply upon the advisability of section division, and not presuppose an overwhelming number of papers, which is really not the fact.

PRESIDENT: Of course this idea of meeting at different times of the year is not contemplated in any such a plan. We are to meet together, and at the same time, whether it is surgical or general, or the eye, ear, nose and throat.

Dr. M. R. Wilkinson, Oconomowoe: I should like to speak a word on this subject that is up for discussion. The organization of the so-called Surgical Society was brought about independently of the State Medical Society—am I not right?

PRESIDENT: Certainly.

Dr. Wilkinson: Now that Society went about

selecting whom they chose to become members. I think it is a conceded fact that every man who is a member of this Society has taken his degree in medicine and surgery.

PRESIDENT: Yes.

Dr. Wilkinson: Some of us are in fields where our chief work has been in general practice. We have done more or less surgery, but we have not attempted to do the most intricate abdominal surgery, and have referred those cases; and yet we are asked by other members of equal preparation to come and join a society as an associate member and pay \$2 to look over their shoulders. That is an insult to the medical profession throughout the state of Wisconsin. The two sections are so inscparable, Gentlemen, that the general practitioner must know surgery; half of his diagnoses are of a surgical character, and he must know surgery, and the surgeon should know medicine. The majority of them know medicine to the extent that easter oil will move the bowels, and that is practically all, and they dislike medicine. But if you want a strong state organization, you will have to move carefully along this line, or the first thing you know you will have an explosion that will split your Society up in so many parts that you will not have a good state organization. General practitioners must be posted in surgery, and it will not hurt the surgeon to know something of medicine,

and I think the two should go hand in hand as they have in the past.

PRESIDENT: I think the gentleman is entirely right. It would be out of the question to adopt the Surgical Society as a part of our Medical Society, if it would, as has been said, give rise to serious complications. It was organized absolutely independently of the State Society, and if it has any further existence it must be entirely independent of the State Society. If we have a surgical session it must originate with this body, and be controlled by this body, and the same if it is a session on eye, car, nose and throat. We have not got to adopt any second hand sort of clothes; we will make an arrangement of our own and govern it ourselves, and it will be a part of the State Medical Society of Wisconsin, and nothing else.

We will listen to anyone else on this subject.

Dr. L. F. Jermain, Milwaukee: I am in favor of sectional work in the State Medical Society, on some such plan as that suggested by Dr. Myers, or any other plan, but I would be absolutely opposed to a division into sections which would hold meetings at different times of the year.

PRESIDENT: Nobody advocates that:

DR. JERMAIN: Or sections which are not dependent upon the State Medical Society and not governed by the State Medical Society. If we want a surgical section, let us have a surgical section of this Society, and let them meet at the same time that the Society meets, so that all of the general practitioners can attend these sectional meetings if they desire; and the same in medicine, and the same in eye, ear, nose and throat. I think it would be a benefit to the Society if we had some division of the work into sections, under the plan suggested by Dr. Myers or some other plan, but they must be an integral part of the State Medical Society.

PRESIDENT: To bring this matter before the House, because we are divided in opinion in regard to it, and it is competent for the House to decide whether we will have sections or not, I think a definite motion, for instance along the line of the suggestion of Dr. Myers, would be better, and then we can talk to that motion, and decide it one way or the other. We are not talking to a motion now, we are simply discussing the subject in a general way, which is entirely useful, because we want to get each other's opinions in regard to the whole

matter. Dr. Sears, do you wish to say anything on this matter, or make a motion?

Dr. H. B. Sears. Beaver Dam: Those of us who have been working in the Society for some time, have found great difficulty in keeping the ordinary member sufficiently interested in the work of the Society to attend the meetings. It seems to me that the object of our State Society should be to emphasize particularly those things that we have in common, and not to specialize too much. I cannot help but feel that the Society would lose prestige, and would fail to interest as many members if divided into sections. If anything is done, it would seem to me that the program should be classified, so that the surgical papers might come in rotation and be presented at one session, and those on eve, ear, nose and throat, in a similar manner in another.

Members could then attend or absent themselves, attending as their interest prompted. I am sure the division into sections would not meet with general approval, and I hope that there will be no such effort put forth. While the program should aim to interest the specialist, it must satisfy the needs and interests of the general practitioner.

Secretary: I wish to again call the attention of the House of Delegates to that part of my report. I took the matter up very earefully with Dr. Craig, and the plan that he suggests for a Society of this size is to give the specialists a chance to get together for a little meeting. That is at the time of the general session, as Dr. Myers suggested, either half a day or two half days. Give the surgeons a chance to get off by themselves and have a little program, and give the eye, car, nose and throat man a chance in the same way. By doing that you take away any earthly excuse for the existence of an independent surgical society, or an independent association of eye, ear. nose and throat men, and you keep everything under one compact head, the department of the State Society. I do not myself believe that the State Medical Society of Wisconsin should get down on its knees to any organization and ask them to come in. But as long as they have gone ahead and felt that there is need for further specializing in their programs, possibly it is advisable for us to give them some opportunity to do so. I think Dr. Dewire is right. I think first of all, that the State Society should consider the general practitioner, and I would not for a moment be in favor of doing away with our general sessions. But to keep everything under one compact head and strengthen medical organization in the state of Wisconsin, possibly it is advisable to give these men some opportunity at the time of the general meeting, to specialize in their particular line. I also think that possibly some of you misunderstood Dr. Patek. His idea was not that these sections should hold independent meetings, but that they should hold their meetings at the time of the meeting of the State Society, as always, but that during the year, if they wanted to hold another meeting, that could be done entirely independently; but it was in no way to interfere with the general session.

DR. THOMAS II. HAY, Stevens Point: To avoid any misunderstanding, if this question should come to a vote, I did not interpret Dr. Patek's remarks as Dr. Sleyster has. I understood him to distinctly say that this surgical section, or surgical association should have independent officers and by-laws, and be independent of the State Medical Society, and we should get that straight before we vote on any question of this kind. I think Dr. Patek did make that statement.

DR. A. J. PATEK: I think that Dr. Sleyster is correct, and that Dr. Hay is also correct. This is what I had in mind: a certain association is now an accomplished fact, and if we are going to sectionalize. I thought it would be easier and more expeditious to adopt these organizations as various sections of the State Society then start anew. I do not believe, for instance, that it would be proper to make up a program of our State Medical Society and have no surgical papers, taking it for granted that the Surgical Association may have them during the year at other meetings. This would deprive us of surgical papers at these meetings. I believe, as others have said, that our meetings should give as much as is possible to devote, to the general practitioner, but I do not believe that if the surgical sections, and the eve, ear, nose and throat seetions, wish to meet at other times and places, where they can have larger clinical facilities than where the meetings are held, they should have the privilege of doing so, and not interfere with our organization. Furthermore, it would strengthen the organization to have the surgical section with our Society, even though it must have an organization independent of ours.

President: Does that clarify the matter, Dr. Hay?

Dr. HAY: It seems to me the question resolves itself into this, that the State Medical Society shall go on just as it has been in the past, and if the surgeons and gynecologists or the genito-urinary men want to start independent societies, they can do so.

On motion duly seconded and carried the meeting adjourned to 8:30 A. M., October 8th, 1914.

## SESSION OCTOBER 8th, 1914, 8:30 A. M.

Meeting called to order by the President.

The minutes of the last meeting were read and approved.

The report of the councilor from the 3rd District was presented by Dr. F. T. Nye, Beloit, as follows:

Dr. NYE: I will simply read the report from Dane County as sent in by the secretary, which shows that last year we had 106, and this year 100, a loss of 6.

In Columbia we had 30 last year, and this year 28, a loss of 2; in Green we had 20 last year and 19 this, a loss of one; in Rock County we had 57 last year and 56 this, a loss of one. I think that has been made up before this, Sauk County, 23 last year and 19 this year, with a loss of 4.

Aside from the general figures, the only question that concerns us—and I do not know whether it concerns us or not—is that I do not think Sauk County paid any of its dues at all perhaps before July or August, and the question, is whether we should do anything about that matter or not. I have not had any reports from them whatever, only those sent to the state secretary. I did think of making the suggestion that the JOURNAL should be stopped after 60 days. Our time limit is the 1st of March.

PRESIDENT: The 15th of March.

Dr. NYE: Well, say 90 days; after 90 days, if they have not paid in, why not stop the JOURNAL of the entire county?

PRESIDENT: According to your constitution they are discredited if they are not paid in by the 15th of March.

Dr. Nye: There is no opposition that I can learn about. I do not know if they held any meetings last year.

PRESIDENT: As a county, I think not.

Dr. Nye: I would like to have your opinion on the matter as to what would be the wisest course to pursue with them, to let it go by default, as we have always done in the past,

PRESIDENT: There must be about 30 or 40 doctors in Sank County altogether, and they are pretty good doctors, too. It is a fine agricultural district, and the communications are very handy, and they could just as

well have good meetings as not. In the very nature of things, that should not be the only county in the state to have no meetings, unless it be the fault of the secretary, as it evidently is.

I would suggest to Dr. Sleyster that some radical means be taken to get a new secretary.

SECRETARY SLEYSTER: While Dr. Currens is out, Dr. Windesheim has made what is possibly a very good suggestion regarding the first night's session of the House of Delegates, and that is, to have the reports read, but delay the discussions on them until they have all been read, and then take them up together. It would help clarify the first night's work, which is always very heavy, and I would be glad to get the expression of the House on that proposition. Possibly Dr. Windesheim has given the matter more thought than I have.

President: You mean the reports of all the committees?

Dr. G. Windesheim, Kenosha: I have noted for many years that our first meeting of the House of Delegates has always dragged out without getting through with the amount of work that is really necessary. Tuesday night we had reports of committees, and the reports were supposed to be read, and before we got to the report of the chairman of the council and the reports of the councilors, and time had extended pretty far into the night. There was still some work which, according to our constitution, must be done at the first meeting, like the appointment of the Committee on Nominations, and some other matters.

I suggested to Dr. Sleyster, if it is agreeable to the House of Delegates in the future to take these reports as they come, by number, and have them read, or read them, and the committee men who are not present should send in the written report so that it can be read by the secretary. Have all of your reports read at the first meeting of the House of Delegates, but not discussed, go through with the order of proceedings as it is given, make the selection of the Committee on Nominations, and then adjourn for the next meeting.

At the next session, take up these reports in their order. The members will have had a chance to think over what they want to do, or talk it over among themselves as to what should be done with those reports, and discuss them and act on them. I think that would probably be a better plan at the next meeting or any following meeting.

PRESIDENT: You might suggest that at the next meeting, Doctor, and the House of Delegates can act on it.

DR. WINDESHEIM: I was going to suggest it at the present meeting so that the rest of the delegates could act on it if they liked. It would give a better chance to discuss the different propositions, for instance, the report of the Committee on Public Policy and Legislation. It took quite a long time to discuss that report, and the discussion was not finished, and the action was possibly not what it would have been if the members could have had more time to think the matter over and talk it over among themselves, and then act on it at a future session of the House.

PRESIDENT: I think the suggestion is a good one, and the only practical difficulty is that the only meeting in which we have plenty of time to discuss matters and do anything else, is the first meeting.

DR. WINDESHEIM: There is no provision anywhere in our constitution or by-laws which prevents this Honse of Delegates from being in session during the time of the general session.

PRESIDENT: I know that it can be done, but I could not be here, and I think it is better for the House of Delegates to be on the floor listening to the papers.

DR. WINDESHEIM: Another way by which the work might be expediated is to have the reports from the various committees submitted to the secretary say a week before the meeting, and have the secretary send a copy of the reports to each one of the delegates by mail, and then the delegates could look over the reports and talk the matter over with their respective county societies, and come here better prepared to discuss them and act on them, and it would save the time of reading these reports or waiting until the man is here to read the report and thinking over what the report means. That would be a second proposition.

SECRETARY SLEYSTER: Inasmuch as these reports are printed in the Journal, would it not be a good idea to have them printed in advance, the type set up and used afterwards, and mail them to the House of Delegates before the meeting, when they will have ample time to read the reports and thus facilitate matters.

President: You mean the reports of all committees?

DR. SLEYSTER: Of all of the committees, not the reports of councilors; that would not be necessary, and they could not be made out in full until the meeting; but the committee reports could be printed in advance of the meeting.

PRESIDENT: That is a good suggestion. I do not know but it is entirely practical.

DR. ZIERATH: The latter suggestion of Dr. Windesheim is a spleudid one. We come here to these meetings, and these matters are suddenly sprung upon the delegates, we have not the least comprehension of what they mean, the discussion take an interminable time, and we do not accomplish much. The meetings are too short, and the reports are not given the consideration which they ought to have.

I move that in the future the reports of all standing committees be published at least two weeks in advance of the first meeting of the House of Delegates, and that each delegate be furnished with a copy of the report, so that he can familiarize himself with the contents, and if necessary, bring the matter up for action before his County Medical Society. That will increase the tone and interest of the delegates. Most of the delegates are appointed and come here not knowing exactly what their duties are, or what is expected of them. I will make that in form of a motion, that these reports be published at least two weeks before the first meeting of the House of Delegates, and that each delegate and conneilor, or each county society or councilor be furnished with a copy of the report.

Motion seconded.

PRESIDENT: I will read the committees. Some are rather active. This motion does not include the conneilors' reports. They are: Committee on Medical Defense; Committee on Public Policy and Legislation; Committee on Publication. That report of course, would have to be very much abridged. Committee on Prevention of Tuberculosis. Committee on Medical Education. We could not have that committee inactive. Committee on Necrology. That would have to be very much abridged: that is of course an obituary notice of all who have died during the past year. Delegate to the National Legislative Council; Delegates to Council on Medical Education; delegates to the

Annual Meeting of the A. M. A.; Committee to act with Board of Public Instruction A. M. A.

Those are the standing committees that we have, and I think it might be well perhaps, to discontinue some of them. They are the only committees that I know of, excepting that this last year there was a Committee on Cancer and I think, one other committee.

Are there any remarks on the motion?

Dr. T. J. Redelings, Marinette: I would suggest that the wording of that motion be "printed" and not "published". It would not be wise to publish those things in advance of the meeting.

PRESIDENT: No, printed.

Dr. ZIERATH: Not a complete report, but the meat of the report.

PRESIDENT: A summary and abridgement.

Dr. ZIERATH: Medical Defense would have to be left out.

Dr. G. Windesheim, Kenosha: With the consent of the doctor who has made the motion, I should like to add to that the suggestion for further work in the secretary's report be also sent out. The secretary had some suggestions to make in regard to some work that the Society ought to take up, for instance that missionary from the American Medical Association. All those suggestions and propositions might be included in this digest, so that we could think the matter over before we came here.

PRESIDENT: Do you accept the amendment to make it include all business likely to come before the House of Delegates which has been sent to the secretary?

Dr. Zieratii: Yes.

PRESIDENT: You have heard the motion that a digest or summary of reports of standing committees, with a statement of the business likely to come before the House of Delegates should be printed, as briefly as possible, and sent to each member of the House of Delegates two weeks in advance of the next meeting. Are you ready for the question?

Motion carried.

PRESIDENT: It is voted, Mr. Secretary. You will see that it is attended to.

Is there any other business to come before the House?

PRESIDENT: We will listen to the report of the Committee on Nominations.

The report of the Committee on Nominations was presented by Dr. Currens, as follows:

### REPORT OF COMMITTEE ON NOMINATIONS.

President-T. J. Redelings, Marinette.

Viee-Presidents-

1st—H. E. Dearholt, Milwaukee. 2nd—Spencer Beebe, Sparta. 3rd—H. W. Morgenroth, Oshkosh.

Committee on Public Policy and Legislation-

J. P. McMahon, Chairman, Milwaukee.

Charles S. Sheldon, Madison, J. J. McGovern, Milwaukee.

Committee on Medical Defense-

G. E. Seaman, Milwaukee,

A. J. Patek, Milwaukee.

S. S. Hall, Ripon.

Delegates to A. M. A.—.

A. H. Levings, Milwaukee.

J. F. Pember, Janesville.

Alternate Delegates to A. M. A .-

M. E. Corbett, Oshkosh.

Edward Evans, La Crosse.

C. M. Eehols, Milwaukee.

State Delegates on National Legislative Committee, A. M. A.—

H. B. Hitz, Milwaukee.

State Delegates on National Medical Education, A. M. A.—

A. J. Patek, Milwaukee.

Publicity Committee-

C. H. Stoddard, Milwaukee.

Chas. S. Sheldon, Madison.

Geo. E. Hoyt, Menomonec Falls.

#### Publication Committee-

A. J. Patek, Chairman, Milwaukee.

O. H. Foerster, Milwaukee.

G. E. Seaman, Milwaukee.

Charles S. Sheldon, Madison.

Sidney S. Hall, Ripon.

#### Committee on Prevention of Tubereulosis-

Thomas H. Hay, Chairman, Stevens Point.

C. A. Harper, Madison.

C. H. Bunting, Madison.

G. E. Seaman, Milwaukee,

J. M. Beffel, Milwaukee.

Committee on Medical Education-

- L. F. Jermain, Chairman, Milwaukee,
- J. J. Van De Erve, Milwaukee.
- C. R. Bardeen, Madison.

Committee on Necrology-

- A. W. Myers, Chairman, Milwaukee.
- A. W. Conkey, Superior.
- J. C. Reynolds, Lake Geneva.

Motion made that the report be accepted. Motion put and carried.

DR. STODDARD: I should like to ask something in regard to this newly created Publicity Committee, of which I am chairman. I am not clear as to the wording of the resolution which created this committee, and what the functions of the committee are to be. And I would also like to know what provision is to be made for the necessary expense involved. You cannot conduct a publicity campaign without money.

PRESIDENT: The idea was, Dr. Stoddard, that there was complaint as far as legislation was concerned, and matters of public policy, that the Society was not sufficiently informed and promptly informed of what was taking place, and what ought to take place, and that there should be some committee to keep them posted.

Dr. H. E. Dearholt: Dr. Warfield was talking about getting this matter before the public, and his resolution in regard to the Publicity Committee was that we should go before the public. I submit it is wrong to say that it is the function of a publicity committee to keep the profession aware of the legislation that is going on.

Dr. Zieratii: To move public opinion, so we could secure the help of the laymen in seening legislation.

Dr. Redelings: If that committee were designed as an educational committee, that would cover the ground.

PRESIDENT: That of course would be along the same lines as the Committee on Public Education of the A. M. A., the object of which is to mould public opinion, and to have these missionaries in favor of better hygiene and better laws sent out to stir up public opinion all over the country.

Dr. Redelings: It would seem to me that this suggestion would be apropos: Dr. Stod-

dard can get information quite cheaply by inquiry of our good friend, Dr. Dearholt, on the methods used by the Anti-Tuberculosis Association in sending copy to the various journals for lay reading matter, and having it published either for a low rate, or as general news. It seems to me that much good may be accomplished in that way. The articles should be very tactfully written.

Dr. J. J. McGovern, Milwaukee: I desire to introduce the following resolution:

Whereas, Twenty-one states have adopted higher preliminary educational requirements for admission of students to the study of medicine, and also require an internship before a medical graduate can take the state board examination; and,

Whereas, These advanced requirements had been accepted by the American Medical Association and adopted by the Council on Medical Education as the minimum educational requirement; therefore, be it

Resolved, That the House of Delegates of the State Medical Society of Wisconsin approves of the plan adopted by the American Medical Association of requiring one or two years of college work besides a diploma from a recognized high school giving a four years course, and that the studies in physics, chemistry and biology in the preliminary science year be of college grade; and, be it further

Resolved, That we endorse the requirement to make an internship in a reputable hospital compulsory before the graduate in medicine is permitted to take his examination before the State Board of Medical Examiners; and, be it further

Resolved, That the Committee on Medical Legislation be instructed to draw suitable bills to be presented to the next legislature to incorporate these ideas into the laws of Wisconsin.

Secretary: A resolution similar to that was passed last year, requiring two years of preliminary college work.

DR. McGOVERN: I think one year of college work is all that we ought to ask. Only certain states of the Union require two years, and two years seems to be a little high. I think if we have one year and the internship that we reach a pretty high plane, and all that we are able to ask.

PRESIDENT: The resolution has been placed before you. Do you move its adoption?

Dr. McGovern: I move its adoption. Motion seconded.

PRESIDENT: In regard to the point made, while

I believe, as was said last year, that two years will unquestionably be the standard, and is the standard for both our medical schools, that possibly it is better policy to ask for one year now, particularly if you incorporate that fifth year in a hospital. The two years will be sure to come, as the four states of Iowa, Minnesota and the two Dakotas already have two years.

DR. L. F. JERMAIN, Milwaukee: I would like to say a few words on that proposition. I am vitally interested in this question, and I, for one, believe that we ought not to quibble on this matter at all.

PRESIDENT: That we ought to make it two years?

DR. JERMAIN: We ought to make it two years.

PRESIDENT: Do you think we can get it to the legislature?

Dr. Jermain: Just as well.

PRESIDENT: I think I would be in favor of it of you can get it just as well.

Dr. Jermain: Every time a medical student comes to us intending to study medicine, we have got to say to him, now that you intend to study medicine, where do you intend to practice when you get through medicine, and he will say, "I do not know, I may practice in Wisconsin, and I may want to practice in Minnesota, or in North or South Dakota." If we have only a provision of one year of college work for him, and he desires to practice in the states of Minnesota, Iowa, North and South Dakota, he cannot practice in those states. Now the chances are that that young man will seize the opportunity that is given him at that time of taking one year of college work, and when he gets through he can not practice in any of those states. If he cannot go before the State Board and take the examination, he is handicapped all the rest of his life, because we have not insisted on the highest requirement.

I feel like this about it: the best is not too good for the state of Wisconsin, and as long as the medical schools have both adopted the two year college requirement, why should the state law fall short of that requirement? I do not see that there will be any opposition to this amendment to the Medical Practice Act, and I do not see where opposition can come from. The Homeopaths would

not object to the two year college requirement, because they have no medical schools in Wisconsin, and the men who are in practice will be glad to have the standard raised. The Osteopaths are the same way. There can be no objection, as they have no medical schools in Wisconsin. The only objection against that sort of law would come from the medical schools, and the two medical schools in the state at the present time have adopted this, and are asking for it, and want it. Now what is going to happen? Since Marquette University Medical School has taken over the schools in Milwaukee, 78 medical students have been dismissed, or have left the school, because they could not keep up with the work; it was too hard for them, and they were simply unable to continue the study of medicine. What have they done? They have gone down to Chieago, to the inferior schools down there, and are going to graduate and come right back to the state and practice medicine here. That is what will happen. You are flooding your state with the product of inferior medical schools because you have not the right kind of a state law. I am sure that this two year college requirement will pass without any trouble, and just as easily as the one year. Why not take the two years right away? That is the standard settled upon, and that is the standard our neighboring states are going to adopt, and why should Wisconsin lag behind? Wisconsin has always been a leader in progress, and it should be a leader now. We who are teaching medicine owe it to the public not only to produce good medical practitioners, but to produce cultured gentlemen, men who can take their place in the ranks of the body politie, and who can be leaders in everything that goes toward the betterment of the human race—not only good medical men, but men in every respect.

DR. J. J. McGOVERN: All you have to do is to strike out the word "one". It reads "one or two"; when you strike out the word "one" it will read "two". If Dr. Jermain will make such a motion I will second it.

DR. JERMAIN: I move to amend by striking out the word "one" and making it read "two".

DR. CURRENS: I second the motion.

DR. JERMAIN: This body has already gone on record last year to that effect.

PRESIDENT: Is there any further discussion?

Dr. A. H. LEVINGS, Milwaukee: I am heartily in favor of and fully agree with what Dr. Jermain has said in regard to the two years of preliminary requirement, but this resolution absolutely requires one year of hospital internship. I know that in Milwaukee students have graduated there and have had eonsiderable difficulty in finding hospital appointments, and a condition might arise where a large number of graduates could not get hospital appointments, and according to this resolution they eould not take the State Board examination, and could not practice medicine. I think that should be scriously taken into consideration. It has been said that there are more appointments open than there are students to fill them, but in some cases that has not been true, and I do not think that we should deprive a student from commencing practice because he could not get a hospital appointment, although he may have tried ever so conseientiously.

Dr. J. M. Dodd, Ashland: I would say in answer to Dr. Levings' statement that that may be true in the city hospitals, but there are a large number of hospitals out through the state, well equipped and competent to give a man a good intern year, and these hospitals cannot get interns. I know that for years we have had the greatest difficulty at our hospital in Ashland in getting anybody to come and take an internship, and it is so now. We are looking for interns all the time, and we cannot find them. And there are other hospitals throughout the state equally well equipped, that are unable to get the interns.

There is going to be a revolution along this whole line. The hospitals have got to prepare themselves to give this intern year and the schools have got to be prepared to furnish the interns to the hospitals, and I believe that when the plan is worked out there will be ample opportunities for medical graduates to get appointments. The truth of the matter is that the young men looking for internships do not like to go out of the large cities, and to a certain extent you cannot blame them, because the spirit of medical education is much stronger in the teaching centers than it is in the smaller places, but I think that will improve, and I think you will have no trouble if you make this requirement in providing positions for all who graduate.

Dr. T. J. REDELINGS. Marinette: While I have

no desire to infliet hardship upon young men anticipating the practice of medicine, I want to subscribe to the sentiment expressed by Dr. Dodd. I believe there are a great many good hospitals in the state, hospitals of 35 to 50 beds, in the hands of fairly competent practitioners, where a young man would get a very rich and valuable experience by giving his services to that institution for a year. And in our community the hospital is really begging for an intern. In fact, we have been unable to succeed in getting interns. And there are two hospitals in the community where there would be valuable experience gained by young men.

Dr. Jermain: I would like to say on this point, that I am in favor of the hospital internship, and I do not think that there will be any difficulty. We have had this year at Marquette University Medical School at least 25 positions as interns that we could not fill with students. We did not have the students to fill the internships that were asked of us.

DR. LEVINGS: That is during the year, is it not?

DR. JERMAIN: No, during the last spring, say at the time of graduation of students in June, the demands for interns came in.

Now that is the situation all over the country, and it is going to come to the point where the hospitals will probably have to pay their interns something in order to get them. That is what is going to happen. The number of internships in this country has increased enormously in the last 5 years, and is still increasing. Hospitals that have never before had interns are placing interns, and they need them, want them, and must have them. They are preparing for this investigation of hospitals by the American Medical Association, and they are afraid of the Committee eoming there to investigate the hospital and finding that they have no interns. The demand for interns is going to be much greater than ever before, and I am sure that we will not have graduates enough to fill the internships, and that only the better and larger hospitals, and those that are willing to pay something for interns can get them in the future. I am fully convinced of this faet, and I do not think there will be any difficulty, because every student that we have at the medical school now ·s going to take an internship-at least everyone who comes into the freshman class now is told that he must

have four years of medicine and one year internship after he gets through with the four years. They understand that, and they will be ready to take the internships when they are offered.

DR. R. W. McCracken, Union Grove: I think this is a rather advanced stand to take. I am heartily in favor of raising the standards. The colleges with few students can probably supply every student with hospital experience, but until the colleges of this country require and demand a fifth year, I think that we are asking a good deal to put this upon the statutes as a requisite of medicine in the state. I think the two years requirement is all this body ought to recommend at this time.

Dr. H. E. Dearholt, Milwaukee: In speaking against hospital internship, I trust that I will not be interpreted as putting myself in the position of being for low standards, but, as Dr. McCracken says, it is going pretty far, and I can foresee objections that would in all probability be verproperly raised in the legislature, which might jeopardize the other features of the bill. For one thing, take the contingency of a young fellow who is at medical college, whose father, or some eminent physician wanted to take him at onee as an assistant. That boy could not go. Another contingency is the possibility of his absolutely having to earn some money, perhaps for the support of a dependent relative; he is absolutely shut off from the possibility. I think it is going pretty far in the way of paternalistic legislation at this time, and I would be much more in favor of sticking for two years' requirements, and letting this other eome on a little more gradually.

Dr. J. J. McGovern, Milwaukee: I think the argument of Dr. Dearholt can be just as well applied against the two year requirement, or against our High School course requirement. I do not think there is any force in the argument at all. It will not jeopardize our legislation a particle, because you can have the bill provide that this requirement shall go into effect at any time that the committee and the colleges agree on, and it would not have to go into effect until 1920, or later, if necessary. But I think we ought to take this stand. As long as all of the graduates can get a position without any trouble in the state of Wisconsin, and we can take care of all of our graduates, I do not think we are working a hardship

on anyone, and particularly if the young man who has to earn money can receive compensation in the hospital.

Dr. L. M. Warfield, Milwaukee: There is one thing to be said, and that is, that the higher you raise the standard of preliminary education, the surer the men will be to take hospital appointments. I think that has been the experience. In other words, you will not have to force a man to take a hospital appointment if he has started in with two years preliminary work and has had his four years in college. I do not believe it is really necessary to incorporate that in the bill, men will do it voluntarily, not because you force them.

Dr. G. Windesheim, Kenosha: When you talk about compulsory hospital internship, would it not necessitate also the grading of the hospitals? There are many hospitals in this country that want interns, but they would not give the intern the facilities to become acquainted with the common ordinary diseases which he meets in general practice. I know of very good hospitals, that absolutely exelude contagious diseases, and ehildren's diseases of any sort. What good does that do a man when he gets out in the country, if he cannot diagnose a case of measles, and does not know it when he sees a ease of small-pox. I know of hospital interns who have spent a year and a half in the hospital, and when they eame out they did not know whether they had a ease of measles or a case of searlet fever. And what was the trouble? It seems to me that hospital internship is very advantageous. Every young man, every student, should, if possible, take an internship in a hospital, but to make it compulsory would necessitate the standardizing of your hospitals also, and supervision of the hospitals along the right lines.

Dr. T. J. Redelings, Marinette: It is apparent that we are getting into a broad field. In reply to what Dr. Windesheim has just said, I desire to eall attention to the fact that in some of our very large and best institutions the internship service is not a rotating service. A man enters the surgical department, or the medical department, or the department of psychiatry, or pediatries, or whatever department he elects to enter. You cannot meet all of these requirements through legislation. That must adjust itself.

DR. ZIERATH: It seems to me that the intern-

ship provision is more vital than the two years requirement. I know that from personal experience. I never had the advantages of a collegiate education, but I had two years internship in the hospital, and if I had the choice of taking two years collegiate education, or the hospital, I would have taken the hospital. I think it is very vital and important to keep that clause in that resolution. I am in favor of it.

Dr. J. M. Dodd, Ashland: In answer to some of the arguments made I wish to say that there has been a movement on foot in the American Medical Association to standardize the hospitals and get them all classified, and have them provide the means of giving the interns a proper year. All the hospitals in the state will be classified, and the medical colleges will be fully conversant with the conditions that exist in all of these hospitals. The tendency will be to make the hospitals improve their service. And everybody will profit by it. The public, and the doctors as well, will get better service, and the hospitals will be much better able to give good service. I think that the problem will be worked out, and I should personally like to see that clause left in there, and require that intern year.

(Calls for the question.)

PRESIDENT: As I understand the situation now, the vote is on the amendment, to strike out the words "one or". All in favor of the amendment will manifest by saying "aye".

PRESIDENT: The amendment carries. That virtually carries the motion. It is necessary, however, to put the original motion. All in favor of the resolution presented by Dr. McGovern, as amended, will manifest by saying "aye".

PRESIDENT: The resolution is earried. Is there further business to come before this body?

DR. ZIERATII: I have a matter that I think is of extreme importance, and which requires the attention of the House of Delegates, and that is the matter of asking the legislature to amend the Workmen's Compensation Act. I think it would involve us in a little discussion, and if we are going to have some more time, possibly it could be put over.

What I have in mind is, asking the legislature to eliminate that clause limiting the payment for medical services by the employer to only 90 days.

If we are to have more time, and it is the consensus of opinion, we will put the matter over until to-morrow. I wanted to take it up on the discussion of Professor Common's paper, but that discussion was shut off so I could not bring it up.

Motion to adjourn to 8:30 A. M., October 9, 1914, made, seconded and carried.

## SESSION, HOUSE OF DELEGATES,

OCTOBER 9, 1914, 8:30 A. M.

Meeting called to order by the President.

PRESIDENT: The House of Delegates will come to order.

The minutes of the previous meeting were read by the secretary and approved as read.

Roll call of delegates.

PRESIDENT: Perhaps the best thing to do before we go into miscellaneous business will be to decide on the place of meeting.

Dr. Cairns is ready with the report of the Auditing Committee, and we will now listen to that report.

Report of Auditing Committee ready by Dr. Rolla Cairns, River Falls, as follows:

Oshkosh, Wis., 7 Oct., 1914.

Your Auditing Committee has examined the accounts and vouchers of the treasurer and find them correct and agreeing with the report.

ROLLA CAIRNS,
HOYT E. DEARHOLT.

Dr. Zieratii: I move that the report be accepted and placed on file.

Motion carried.

PRESIDENT: The next order of business will be to decide the place of meeting. We have but one invitation that I know of.

Dr. Zierath: Oconomowoc, Superior and Milwaukee.

DR. S. S. Hall, Ripon: We have four. You know we had an invitation from Ashland when we decided to meet in Milwaukee once more and then go to Ashland, and that has been forgotten.

DR. ZIERATH: Is that offer still good?

DR. HALL: It is still good. I have had a conversation with Dr. Dodd yesterday, and I told him that we had an invitation to go to Superior, and

he said, "Well, you have got to go to Ashland before you go to Superior; you have been there twice, and have not been to Ashland at all."

DR. CAIRNS: Can Ashland accommodate us?

DR. HALL: Surely they can. They have plenty of land and plenty of water, and an island out a little way, and boats.

PRESIDENT: I think Ashland could accommodate us all right. There are four invitations then, Milwaukee, Ashland, Superior and Oconomowoc.

Dr. T. J. REDELINGS, Marinette: I move you that we accept the invitation from Milwaukee.

Motion seconded.

PRESIDENT: I suppose I can put that motion, or we can have an informal ballot. One way is as good as the other, as far as I know. Are there any remarks on this motion, that we should go to Milwaukee? Of course the people that wish to advocate other points may air their views on that subject before voting. You can talk on the general subject of that motion.

Dr. R. U. Cairns, River Falls: We all like to go to Milwaukee, and I am not an exception to the rule. And, as I have often said, for me personally, and I think for a good many in the state, it is as easy to get to Milwaukee as to any point in the state. I can take the night train and sleep, and in going to many of the nearer places it means the loss of a day or the loss of a night. But still I think we ought to consider the other parts of the state. It is a number of years since we have been to the north part of the state, and I for one would like to see the Society go to that section of the state, and I think we ought to consider our councilor, Dr. Dodd, who has worked so faithfully with us, and if Ashland can accommodate us I would favor going to Ashland. As this motion is before the House I would recommend that we vote it down and take an informal ballot. I believe it is better to decide this matter by ballot than by acclamation.

PRESIDENT: Are there any other remarks?

Dr. G. WINDESHEIM, Kenosha: It seems to me that it has been the custom of this Society to meet every other year in Milwaukee, and other years to meet in some city outside of Milwaukee, and I believe that custom is a good one.

Dr. S. S. Hall, Ripon: I am inclined to think it is advisable to go to Milwaukee for the next meeting, on account of the old rule. That rule has had one or two exceptions. For instance, we met in Superior one year, and the next year in Madison.

PRESIDENT: Are there any further remarks? I do not know that an informal ballot, Dr. Cairns, makes any difference, as long as we come to a vote and get an expression of opinion. I do not know as it makes much difference whether you take it viva voce, or by a ballot. It will be a fair count, you may rest assured. All we want to know is where the majority want to go.

If there are no further remarks, the motion is that we shall meet in Milwaukee, and all those in favor of that motion will signify it by saving "ave".

Motion carried.

PRESIDENT: The vote of the House is that we shall meet in Milwaukee.

Is there any other business?

Dr. W. F. Zierath, Sheboygan: I desire to bring a matter before the House of Delegates that I think is of very great importance to the medical men of the state of Wisconsin. It is with reference to the hardship imposed upon the physicians by the present Workmen's Compensation Act. I have had a personal experience recently in that line that has brought the matter to my notice, and I desire to bring it to the attention of the House of Delegates.

There is a clause in the Workmen's Compensation Act which limits the payment by the employer for medical services, to 90 days. After the 90 days have expired, the employee must pay for the physician's services. Any man who is laid up for a period of 90 days or longer is not usually in a position to pay doctor's bills. He has had the first part of his medical services paid, and he does not feel that he should be called upon to pay for the balance of those services; and the law does not compel the insurance company or the employer to pay them. Neither is it possible to sue the patient and obtain a judgment against the compensation that the Commission will award him, and he cannot give the physician an order on that compensation. It is absolutely illegal. If the patient pays for the services of his own free will and accord they will be paid for; otherwise not. I had a case recently where I presented my bill and was told by the insurance company that probably they would pay the bill after 90 days, but when I presented it they turned it down, and my attorney told me that I could not collect it.

If physicians who are treating such cases and realizing that they are not going to be paid for their services after the end of 90 days, stop attending the case at that time, they place themselves in a very serious predicament. They can leave the case by giving due and proper notice, of course. But usually patients that have been injured and are permanently crippled feel that in some way the doctor is to blame for their particular condition, and if he leaves the case they will assume that it is an admission on his part that he has done something wrong. The case may get into the hands of an unfriendly competitor, and he may stick the knife into a man, or it may get into the hands of a man who has not followed the case from the beginning and he conscientiously advises a different course of treatment, which may result in further injury to the man, and possible injury to the doctor from malpractice suits. Nowadays our medical defense fund is called upon very largely to defend cases arising out of the Workmen's Compensation Act.

To bring the matter up for discussion, I would move that the House of Delegates instruct our Committee on Public Policy and Legislation to apply to the legislature of the state of Wisconsin, asking them to repeal that portion of the Workmen's Compensation Law which limits payment for medical services to 90 days.

Motion seconded.

PRESIDENT: Gentlemen, you have heard the motion that the Committee on Public Policy and Legislation petition the legislature to repeal that part of the Compensation Act limiting the payment for medical services to 90 days.

Dr. ZIERATH: Yes, and simply leave the payment for medical services until the man is well. Dr. Seaman ought to be able to tell us about that matter.

PRESIDENT: Probably you men understand that, but are there any further enlightening or explanatory remarks, or any objection to this motion? Dr. Seaman, have you anything to say on the subject?

DR. G. R. SEAMAN, Milwaukee: No. Mr. President. I have not. I really do not know.

PRESIDENT: Is there any objection to repealing that part of the Act? What was the object in the first place of making a limit of 90 days?

DR. G. E. SEAMAN: It would seem to me that it would be better action to leave this matter to the Committee on Public Policy and Legislation, without positive instructions as to what they shall do, and let them determine what is the wise course to pursue. It does seem to me that it is an injustice to the injured man to limit the payment for medical services to 90 days, because we all know that many men who are injured are sick and in need of medical serivces for a longer period than 90 days. But I think the better plan would be to leave it to the Committee, with instructions to investigate and take such action as in their judgment would be wise, rather than definitely instruct them to work for a repeal. Personally I do not know enough about it to say. An amendment of some sort might be advisable.

PRESIDENT: I suppose the reason for limiting it was to lessen the expense.

DR. ZIERATH: I investigated that phase of the subject, and so far as I can find out the intent of the legislature was to prevent conspiracy on the part of the doctor and patient to string the thing out everlastingly. If the employers cannot trust the medical profession for 90 days, they cannot trust them for 9 days. If we wanted to slip it over in 9 days we could do it just as well as we could in 90 days.

I have had considerable correspondence with Mr. Crownhart concerning the case, and nothing can be done. I told him I would bring this matter before the House of Delegates.

PRESIDENT: What did he think?

DR. ZIERATH: He was noncommittal. Of course he could not commit himself. But I believe that it would be best to have this resolution passed in the way I have framed it, and make it mandatory on the Committee of Public Policy and Legislation.

PRESIDENT: Are there any further remarks?

SECRETARY: Gentlemen of the House of Delegates, I would like to introduce Senator Monk, a practicing physician for many years, and one of the best friends we have in the state senate, and possibly he could tell us something about it.

PRESIDENT: Senator Monk, have you any wisdom on this subject?

SENATOR MONK: I came in late and did not hear the full discussion.

PRESIDENT: It seems that the attendance on injured men is limited to 90 days by the Employers' Liability Act.

SENATOR MONK: I heard that portion of it.

PRESIDENT: And the motion was that that part of the Act limiting it to 90 days should be repealed; that is, that the attendance should be as long as necessary for the case.

DR. ZIERATH: In one case the employers pay for it, and in the other case the doctor has got to assume the burden of taking care of those people.

President: After 90 days.

Dr. Zieratii: Yes. We do not get paid in the majority of cases.

Dr. Seaman: If I may be permitted to make another remark, I want to say that I served on the Committee on Public Policy and Legislation of the State Medical Society for quite a period of time, and I think that it is wiser action not to tie the hands of the Committee, or definitely instruct the Committee upon a matter which has not already been very thoroughly threshed out by the Society or by the House of Delegates representing the Society. Doubtless that Committee would take the action that the doctor suggests, but before taking any action it would be the wiser policy for them to look into the whole matter and take it up with the Industrial Board, and perhaps with certain men who were interested in the framing of the Workmen's Compensation Law, and find out what the reasons for this particular provision of the law were, and what objections there would be to a proposed repeal, and whether such reasons are good or indifferent, and proceed in that way rather than to instruct for definite action, without any more information than the members of the Society have upon the subject at the present time. I think that would be the better policy.

Dr. ZIERATIL: If you make that in the form of an amendment, I will accept the amendment.

Dr. H. E. Dearholt, Milwaukee: Do we not have a committee appointed to represent the

Society in conference with the Industrial Commission?

PRESIDENT: There is a committee.

DR. DEARHOLT: It would seem to me that committee would be a very happy medium to work through. They have the confidence of the Industrial Commission for one thing, and the Committee seem to have been appointed for that particular purpose. I would amend this so that this matter be referred to the Committee on Public Policy and Legislation together with the Industrial Committee that we have.

PRESIDENT: To work it out.

DR. DEARHOLT: To work it out jointly.

PRESIDENT: Do you accept that amendment?

Dr. Zierath: It seems to me to be complicating the matter still further. I think the action is perfectly clear. Of course that is all right. I think that after they have investigated the matter they will arrive at the conclusion that I have arrived at, that it ought to be repealed. I will accept any of those amendments, and make the resolution agree with that, that it be referred to the Committee on Public Policy and Legislation and this other Committee.

PRESIDENT: And the secretary will accept as well, I suppose. If there are no further remarks on this question, you have heard the motion that this question of the 90 days limitation be referred to the Committee on Public Policy and Legislation, in conjunction with the Advisory Committee of the Liability Board, and action be taken. All in favor of that motion will so signify.

Motion carried unanimously.

Dr. G. Windesheim, Kenosha: About ten years ago, I think, a motion was passed in the House of Delegates to have our constitution and by-laws revised, and have all of the various resolutions that have been passed amending the constitution and by-laws incorporated, a committee was appointed at that time, but the committee never did the work.

Under our present manner of doing business we are, according to the old constitution and by-laws, doing business illegally. I believe that it is necessary at the present time, when in all probability no more amendments will be brought before the Society, and when in fact everything is now arranged so that it is satisfactory, that this com-

mittee, composed of the secretary at that time, who had access to all of the records, and the president, be instructed to revise the constitution and by-laws and bring a copy of the revision before the House of Delegates at the next meeting, at which time the House of Delegates can decide whether it wants to still further revise or correct or change any of the sections.

CHAIRMAN: Is that in the form of a motion, Dr. Windesheim?

Dr. Windesheim: I make this in the form of a motion, that it should be done this year, and no longer postponed. There has always been some excuse for postponing it.

Motion seconded.

CHAIRMAN: Is there any discussion of the motion?

DR. H. E. DEARHOLT: Inasmuch as there is only one man in the Society that knows anything about the constitution and by-laws, I would like to suggest that Dr. Windesheim and the secretary be appointed such a committee.

SECRETARY: I think that is a very wise amendment. There is no one in the State Society who commences to know the constitution as Dr. Windesheim does.

DR. WINDESHEIM: I accept the slam, that I am the only man that looks after the constitution. But the only thing which I have access is the old constitution, which is practically worthless at the present time. I do not know anything about the amendments which are on record with the secretary somewhere.

CHAIRMAN: It will be a gigantic piece of work to review all those records.

SECRETARY: I think we can work it out.

Dr. S. S. Hall: It has got to be done.

CHAIRMAN: It would seem to me that Dr. Sheldon would perhaps be a valuable man as an advisory member of that committee. Is there further discussion? Dr. Windesheim, your motion was that the secretary and president constitute such committee. It would now be necessary to amend that motion to include Dr. Windesheim, if that is your pleasure, or you can incorporate it. But that will be perhaps rather embarrassing.

Dr. L. F. Jermain: I move such an amendment, that Dr. Windesheim be included in this committee.

Motion seconded.

Motion put and unanimously carried.

CHAIRMAN: The amendment prevails. We will now vote on the original motion.

Original motion put and unanimously carried.

CHAIRMAN: The motion prevails, and I trust that the present committee will execute your wishes in the matter.

SECRETARY: There are two matters that I desire to bring before the House of Delegates.

First, the House of Delegates will recall, I think, that part of my annual report in which I referred to Dr. Craig's letter regarding organization work. Dr. Craig is here and can explain the matter to us, and I would like the House of Delegates to take some action on it. When we originally started in we thought the Council would have power to take care of the matter, but the watch-dog of the constitution raised the question that it was not within the power of the council to do that, that it must come before the House of Delegates.

Dr. Craig, will you explain your plan of sending out organization workers, or is it too late for us to take advantage of that?

Dr. A. R. Craig, Secretary A. M. A.: No, I think, Mr. Chairman, it is in order to take your action, if you will permit us to accommodate the Wisconsin State Society at the earliest opportunity.

By organization work we mean that there are a certain number of men who are engaged in soliciting subscriptions to the Journal, and who have developed a faculty for increasing the membership in local societies, under the direction of the officers of the State organization, and the officers of the local society. These men go into a district, and first report to the president and secretary of the State Society, then to the councilor of the District, then to the officers of the local society, and will solicit membership from such non-members as are reported to be persona grata to the present organization. They do not solicit membership from any other individuals in the district, and the work is constantly under the supervision of the local Society. There is just one exception, and that is, for instance, if a gentleman in that society asks them why they do not solicit Dr. John Doe as a member, and Dr. John Doe is not on the list, they will solicit that member, provided the gentleman suggesting this, recommends him; the man does not become a member of any society or organization until he is formally and duly elected.

In certain states where this work has been done, a number of men who have resisted appeals from physicians and medical men, look at the matter in an entirely different light when a business man comes to them. Some of these men have been set to oppose any approaches from the profession, which gives the outside men an opportunity to give them a' little push in the right direction, so that they become affiliated with the organization. The plan has worked well in other states.

At the present time these men are working in the southern part of the country, and it may be next summer or the winter following before they could come to Wisconsin; but if Wisconsin puts itself in position so as to empower its counci! or the officers of the State Society, in its discretion, to take up the work when the time comes, you will be in position to avail yourself of their services, and we will appreciate it, and hope that it will be mutually advantageous to the American Medical Association and your state organization.

CHAIRMAN: Will you please state how these men are compensated so that it will be fully understood.

Dr. Craic: These men are compensated by the American Medical Association paying them a small salary, and a small allowance for traveling expenses. In addition to that they receive from the Journal of the American Medical Association a commission for any new subscriptions that the Journal obtains through their work. And the states where we have co-operated, have given to the organizer, through the officer of the American Medical Association, a dollar per capita for each man who qualifies as a member of the State Society. This does not mean every man they solicit, but only each man who qualifies as a member of the State Society, through joining the local component organization.

CHAIRMAN: That is paid through the State Society?

Dr. Craig: The State Society pays the one dollar for each man. It costs the American Mcdi-

cal Association, I might say in passing, the full subscription price of the Journal for the first year; it costs your State Society about one-half of the per capita tax for the first year.

DR. J. F. RIORDAN, Berlin: I think that is a fine thing, and I recently incorporated that as a suggestion for helping out our County Society, and I found that physicians in our county whom I could not approach at all, would readily come into the fold when approached by the secretary of the State Society. That has happened with Dr. Sleyster in one instance, and I have had two such instances. The physician is not capable of doing that work, because he does not apply all of his time to it.

Dr. G. Windesheim, Kenosha: I would like to say a few words in regard to a motion that may come before the House. When Dr. Sleyster wrote to me about this proposition, I told him that the council is not empowered to take any action upon any question that involves the expenditure of moncy for the State Society; that that question must first be acted upon by the House of Delegates. But if the House of Delegates desires to refer this question to the council, it can do so, and empower the council to act on it and spend the money if it sees fit to do so, and that would settle the question for the House of Delegates.

Secretary: I think that would be a very wise way of disposing of the question quickly, and the council can give it fuller consideration, and have power to act in case they decide so to do.

Dr. Stalker: Mr. President, I make that as a motion, that this matter be referred to the council.

SECRETARY: With power to act.

CHAIRMAN: That matter should be attended to to-day, and I do not know that there will be a meeting of the council; I have had no notice.

SECRETARY: There is no hurry about it, because Dr. Craig, says we could not have anyone for a year anyway.

PRESIDENT: Is there a second to that motion?

DR. HEAD: I second the motion. Motion put and carried.

PRESIDENT: The motion prevails. Is there further business?

SECRETARY: I have one matter more that I want to bring before the House of Delegates.

Some months ago Dr. Dearholt in a talk with me suggested that the State Society should through the Journal and the secretary's office, endeavor in every way to make itself more useful to the membership. To accomplish results it is necessary to have money. That is one thing that has always limited us in extending our activities. He had a plan that it would be possible for the State Society and the members, to buy their medical books either through the Journal office, or through the office of the state secretary, and either allow the dealer's discount to the members, or let that accumulate as a fund to be used for legislative work or any other work that might come up, such as publicity, public instruction, etc. It is rather a new and novel idea. and I have been unable to find any society that is doing anything along this line. But I have taken the matter up with the publishers, and I find that most of them are willing to give us 20 to 25% discount on medical books. If this could be worked out, that money could just as well be saved, and we could get some use from it. I find that the publishers will not allow us to retail their books under the regular list price, so that the discount could not go back to the buyer, although it could be arranged so that the discount could remain in the state treasury. We have pages of the Journa! in which the scheme could be advertised, and the new books called to the attention of the members, and if the plan could be brought up to a point of perfection, (assuming that every man in the state buys an average of \$10 worth of books a year, and I think that is not a high average), it would amount to \$18,000, and 20% would amount to \$3,600. So you see, with the co-operation of the membership it could be brought up to quite an income. I think the scheme is worth trying out. Do you know of anything of the kind, Dr. Craig?

Dr. Craig: It may be possible for you to do so. I am afraid that the placing \$10 per capita as the possible purchases of your membership, that your secretary looks through roseate glasses. If Wisconsin men purchase \$10 worth of books per capita every year, you are to be congratulated, because that is what you ought to do, but most of the state societies do not do it.

CHAIRMAN: I thought that that was very low.

DR. CRAIG: Probably the men in this house do. but you must remember that there are many, many men who do not buy a dollar's worth of books from the time they graduate until the time they are put into their graves, and there are others who never pay for the books that they do buy, in spite of the fact that they are doctors. That is, however, just in passing. It simply shows that while you have the germ of a possible service to the membership, it is worthy of more serious consideration than has been given it up to the present time. And while I should like to see all possible accomplished, and would like to know that Wisconsin is able to do this, among other advanced things which Wisconsin does, it seems to me that the proper thing to do is to study all phases of the subject before you take any definite action.

DR. S. S. HALL, Ripon: Mr. President and Gentlemen: It is putting the State Medical Society of Wisconsin on a commercial basis in a certain way, and I think we should avoid this. I am afraid the result would be unpleasant. We meet all kinds of opposition to the expenditure of money. Of course there are some members of the State Society who buy books. A good many members probably buy \$100.00 worth a year, but, as Dr. Craig has said, they are the exception. We have a very large membership that never buys books.

PRESIDENT: There is no motion before the House. And I want to call your attention to the fact that we are losing time.

DR. CAIRNS: I would move that this question of establishing a purchasing department in the State Society be referred to the council, with power to act. I think that the council can look into the question better than the House of Delegates could, and I personally feel there is something along this line that might be done, but I think it is better to leave it to the council with power to act.

Motion seconded and carried.

Dr. Head: I should like to make a statement. Those of you who were present at the first meeting of the House of Delegates Tuesday night, will remember that when the report of the Committee on Legislation was up for consideration, I moved to postpone any further consideration on that report until Dr. Bardeen, or some representative of the Medical Department could be present. Dr. Bardeen is present this morning, and I offered to bring the matter up, but Dr. Seaman suggests that it would be more satisfactory if the Dane County Medical Society took that matter up with the

regents personally, and, as a representative of that society I have accepted that suggestion and the matter will be brought up, and Dr. Bardeen does not care to make any statement this morning.

CHAIRMAN: I am very glad that the matter is disposed of in that way, which seems to me to be a very wise way to dispose of it.

Is there any further business? If not, a motion to adjourn is in order.

DR. G. WINDESHEIM, Kenosha: I move that we adjourn.

Motion seconded and carried.

## **ABSTRACTS**

ON CONGENITAL UNILATERAL DISTURBANCES OF THE COLOR SENSE. Hegner, C. A., (from the eye clinic of Prof. W. Stock in the University of Jena. Klin. Mon. f. Aug., 54, p. 81), found the left eye of a student who was examined with Nagel's anomaloscope, and Nagel's and Stilling's plates, to be red anomalous. V of both eves with -2.50 5/15. Fundus normal. The patient noticed about six months ago a difference in the color perception of each eye. For the last five semesters he was intensely occupied with microscopical studies, for which he exclusively used his right eye. At first he oecasionally could not exactly diseern finer differences of color, but gradually overeame this deficiency completely. Hence H. concludes, that the color sense of the right eye at first weak was improved by exercise, and intends to try this also for the left eye. This is analogous to the often remarkable amelioration of congenitally amblyopic eyes by systematic exercises. Favre and Knoll made similar observations and reported cures of color blindness by methodic color exercises.

At the instance of this case H. tested the color sense of 50 persons, mostly students, and found in 10, i. e., 20%, marked disturbances. Two showed a decided difference in the color sense of both eyes, which so far has been considered extremely rare.

C. ZIMMERMANN.

ON THE ACTIONS OF FERMENTS ON THE EYE AND THEIR RELATIONS TO SYMPATHETIC OPHTHALMIA. Guillery, H., Coeln, (from the bacteriological laboratory of the City of Coeln. Archiv. für Augenheilkunde 76, p. 226), proved, in continuation of his former investigations, by further experiments the facts that there are poisons. which introduced into the veins, are eapable of eliciting an intraocular inflammation limited to the uvea of the previously intact eyes. The elinical history of an experiment on a rabbit is reported in detail, in which G. produced a severe ehronic iridocyclitis of both intact eyes by 10 intravenous injections of an absolutely sterile solution of prodigiosus and subtilis ferments, within 7 weeks. Anatomically this was characterized by intense infiltration of the uveal tract with round and epitheloid eells.

In another experiment the toxic solution to which rabbit serum had been added, proved especially effectual. The elinical history and anatomical findings in a third experiment are reported in which the intravenous injections were made after an affection of the right eye of a rabbit has been created 5 days previously by injection of 0.4 cem, of the toxic solution into the vitreous after puneture of the anterior chamber. The rapid, almost instantaneous reaction of the right eye, which was now in a chronic state of irritation, to the intravenous injection in form of acute hyperemia and miosis, apparently caused by hyperemia of the iris, was striking. G. lays especial stress on this symptom, because in his experience after the use of solutions which have this action on the pupil, the occurrence of more intense inflammatory phenomena is to be expected in the further course of the experiment. The animal was killed on the 18th day after the intraocular injection. The right (injected) eye exhibited the same changes, as formerly described by G. after intraoeular injections, and those of the left eye were scarcely less intense. Only the participation of the anterior segment was decidedly slighter, the infiltration of iris and ciliary body being less marked, but a large focus at the root of the iris and the numerous epitheloid eells were peculiar. The alterations of the chorioid were not less striking in the left, not injected, eye, than in the right, injected, eye. Hence it could not be decided how much of the changes of the right eye was to be attributed to the intraoeular, and how much to the intravenous injections. It also remained questionable how far the second eye was influenced by the first eye, since the identical changes can be produced by such intravenous injections in healthy eyes. Therefore we eannot quite follow the author, when after this he says, "Although here the pieture of human sympathetic ophthalmia has not yet been established, one must concede that eertainly 'sympathization' of the second eye occurred in the sense that it became affected with the same changes as the first." According to G. such observations show again, that we are with these experiments on the right path to come nearer to the understanding of this disease.

G.'s investigations have been very earefully planned and are very exact, and we urgently recommend this interesting essay for a closer study. The anatomical conditions are illustrated on three plates.

C. ZIMMERMANN.

THE TREATMENT OF GONO-BLENNORRHOEA OF THE NEW-BORN AND ADULTS AT THE EYE CLINIC OF THE UNIVER-SITY OF BERN. Siegrist, A., and Schenderowitsch, P. (Klin. Mon. f. Aug., 54, p. 228). Since 1907 nitrate of silver has been supplanted at the elinie of Bern by collargol 3% and syrgol 5% in the treatment of blennorrhoea, as their application does not, like the former, require eversion of the lids, and eonsists only in instillations. Fifty-three newborn children were treated with collargol, 43 with syrgol, and are reported in tabular form. The results not only in ordinary but also in eases of severe corneal complications in the newborn and adults were equally good. Occasionally syrgol eaused in the newborn offensive diarrhoea and disturbance of the general condition. C. ZIMMERMANN.

## LIST OF MEMBERS OF THE STATE MEDICAL SOCIETY OF WISCONSIN

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McKee, F. W., Richland Center.
McKelnie, R. S., Hillsboro.
McKee, F. M., Richland Center.
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Nelson, O. A., Winter,
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Parshen, James G., Milwaukee.
Payne, A. L., Ean Claire.
Pearies, Ralph R., Milwaukee.
Pearse, Ralph R., Milwaukee.
Pearse, Ralph R., Milwaukee.
Pearse, W. A., Oisego.
Pease, W. A., Oisego.
Pease, W. A., Oisego.
Pease, W. A., Darlington.
Peebles, Mary, Shallsburg.
Peehn, Fred G., Corliss.
Peerram, James W., Milwaukee.
Pembleton, W. E., Wittenburg.
Pennoyer, N. A., Kenosha.
Perrin, Geo. H., Menomonee Falls.
Perrin, Geo. I., Waupaca.
Peterson, C. E., Independence.
Peterson, C. E., Undependence.
Peterson, E. F., Wanwatosa
Peterson, G. E., Waukesha.
Peterson, E. F., Wanwatosa
Peterson, S. A., Soldiers Grove.
Petzki, E. A., Hixton.
Pfoiffer, U., Jackson.
Pfoiffer, U., Jackson.
Pfoiffer, U., Jackson.
Pfoiffer, J. Jackson.
Pfoiffer, J. Jackson.
Pfoiffer, J. Jackson.
Pfoiffer, J. Jackson.
Pfoiffer, E. J., New London.
Pfoiffer, E. J., New London.
Pfoiffer, J. Jackson.
Pfoiffer, M., Jackson.
Pfoiffer, J. Jackson.
Pfoiffer, M., Jackson.
Pfoiffer, J., Jackson.
Poope, F. J., Racine.
Pope, F. J., Racine.
Pope, F. W., Marshfield.
Pierce, W. J., Dodgeville.
Pinkerton, William T., Prairie du Chien.
Plumblee, R. S., Brooklyn.
Poope, F. W., Racine.
Pope, F. W., Racine.
Pope, F. W., Racine.
Pope, F. W., Racine.
Pope, J., Hadlen.
Prince, L. H., Madlson.
Pritchar, J. F., Milwankee.
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Quade, E. B., Wansau. Quick, E. W., Milwankee. Quin, J. F., Milwaukee. Quint, J. F., Milwankee, Raasoch, H., Nelsonville, Racek, G. J., Princeton Radloff, A. C., Plymouth, Ragau, W. F., Neopit, Ragan, W. J., Shawano, Randall, A. J., Kenosha, Rantz, W. L., Rosholt, Rath, R., Granton, Rathbun, John W., Prairie du Chieu, Rathert, E. T., Chitton, Ravan, M., Merrill, Raymond, R. G., Brownsville, Read, Flora A., Fond du Lac, Reagles, Robert, Arlington, Reay, G. R., La Crosse, Rector, A. E., Appleton, Redelings, Theo. J., Marinette, Reed, W. W., Jefferson, Reeve, Janes S., Appleton, Reich, H. C., Sheboygan, Reich, J. J., Fond du Lac, Reich, H. C., Sheboygan, Reich, H. C., Sheboygan, Reich, H. C., Sheboygan, Reich, H. C., Sheboygan, Reich, H. C., Appleton, Reich, Milliam F., Milwankee, Reineking, H., Green Bay, Rice, E. M., Milwankee, Rice, E. M., Milwankee, Rice, P. A., Delavan, Richards, C. A., Rhinelander, Richards, R. L., Roskon, R. R. Raskette, R.

Russell, H. C., Milwankee. Russell, T. P., Oshkosh. Ruthin, K. A., Ridgeland. Ryan, C. E., Appleton. Ryan, E. S., Oshkosh. Ayan, E. S., OSHKOSH.
Salter, H. G., Cascade.
Sanborn, M. J., Appleton.
Sarazin, F. C., Superior.
Sarles, W. T., Sparta.
Sattre, O. M., Rice Lake.
Sauerhering, D., Wausan.
Sannders, George, Superior.
Sauthoff, Angust, Mendota.
Sayle, R. G., Milwankee.
Sayles, L. W., Baraboo.
Saylor, Herbert, Merrill.
Shafferzick, Charles, White Sulphur Springs, Mont.
Schallern, Brinno, Ripon.
Schallern, Ottmar, Ripon.
Schallern, Ottmar, Ripon.
Schaper, Herman. Appleton.
Scheid, G. F., Fond dn Lac.
Scheid, M. M., Rosendale.
Scheid, M. M., Rosendale.
Schein, J. E., Oshkosh.
Schell, Ida L., Milwankee.
Scheir, J. F., Cohmbus,
Schmidt, E. S., Green Bay,
Schmidt, E. S., Green Bay,
Schmidt, J. A., Brillion.
Schmitt, M. J., Wausau.
Schmitt, Hillip, Milwankee.
Schmitt, G. J., Folot.
Schmitt, G. New London.
Schmitt, Felix, Milwankee.
Schmitt, U. S., School Hill
Schmider, Fred. New London.
Schneider, John F., Oshkosh,
Schneider, John F., Oshkosh,
Schneil, W. H., Suberior.
Schoen, R. E., Beaver Dann.
Schoen, C. M., Milwankee.
Schoen, R. E., Beaver Dann.
Schoen, C. M., Milwankee.
Schoen, R. E., Beaver Dann.
Schoen, C. M., Milwankee.
Schoen, R. F., Beaver Dann.
Schoen, C. M., Milwankee.
Schoen, R. F., Beaver Dann.
Scholz, G. M., Milwankee.
Schoen, R. F., Beaver Dann.
Scholz, G. M., Milwankee.
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Schoen, C. M., Milwankee.
Schoen, R. F., Beaver Dann.
Schoel, G. M., Milwankee.
Schoen, R. F., Beaver Dann.
Schoel, G. M., Milwankee.
Schoen, R. F., Beaver Dann.
Schoel, G. M., Milwankee.
Schoen, R. F., Beaver Dann.
Schoel, G. M., Milwankee.
Schoen, R. F., Beaver Dann.
Schoel, G. M., Milwankee.
Schoen, R. F., Beaver Dann.
Schoel, J. R., Appleton.
Schwallach, C. G., Junean.
Schwallach, C. G., Junean.
Schwallach, C. G., Junean.
Schwallach, C. G., Junean.
Schwallach, G. G., Junean.
Schwallach, G. G., Junean.
Schwallach, G. G., Warrens.
Scildon, W. B., Flagerton.
Schwall Sincock, H. A., Odanah
Sizer, E. M., Fall Creek.
Skwor, Charles J., Neosho.
Slaughter, A. W., Ephraim.
Sleyster, Rock, Waupun.
Slyfield, F. F., Algoma.
Smedal, Gregor, La Crosse.
Smieding, George, Mineral Point.
Smitle, C. J., Ashiand.
Smith, A. D., Gilmanton.
Smith. C. E., Beloit.
Smith, C. E., Mukwonago.
Smith, C. M., Jr., Evansville.
Smith, G. M., Jr., Evansville.
Smith, George Lewis, Jefferson.
Smith, Jos. F., Wausau.
Smith, W. W., Madison.
Smith, S. M. B., Wausau.
Smith, W. W., Salley, Maliwaukee.
Smith, S. M. B., Wausau.
Smith, W. A., Boyd,
Smith, W. P., Waupun.
Soles, F. A., Spencer.
Sommers, Julius, Madison.
Soren, Racine.
Sonthwick, F. A., Stevens Point.
Spadding, J. B., Kenosha.
Spawn, M. G., Beloic.
Spears, T. R., Washburn.
Specht, John, Superior.
Spencer, G. F., Evansville.
Spencer, Leonard, Wansau.
Sperry, S. P., Milwaukee.
Sperry, Willis P., Phillips.
Spiegelberg, E. II., Boscobel.
Spitz, Milton, Milwaukee.
Sperry, Willis P., Phillips.
Spiegelberg, E. II., Boscobel.
Spitz, Milton, Milwaukee.
Stack, G. F., Independence.
Stack, G. F., Stanley.
Stehbins, W. W., Verona.
Sterle, George M., Oshkosh.
Steffen, S. A., Antigo.
Stephenson, W. L., Ladysmith.
Stevast, F. M., Shanley.
Stephenson, W. L., Ladysmith.
Stevens, Frank E., Bristol.
Stevens, Frank E., Bristol.
Stevens, F. J., Sparta.
Stevens, F. P., Sparta.
Struch, J. J., Winenbago.
Stephenson, W. L., Ladysmith.
Stoeling, C. W., Oconto.
Stoelen, J. P., Milwaukee.
Suby, J. L., Stonghton.
Stoele, G. A., Thilwaukee.
Suby, J. L., Stonghto

Taylor, J. G., Milwaukee.
Taylor, J. R., Madison.
Taylor, L. S., Waupun.
Taylor, M. W., Kilbourn.
Taylor, R. W., Pewankee.
Teschan, R. C., Milwaukee.
Thackery, R. C., Markesan.
Thayer, C. E., Markesan.
Thayer, F. A., Belgit.
Thewalt, W. B., Poysippi.
Thieke, G. A., Wausau.
Thill, D. P., Milwaukee.
Thomas, J. S., Milwaukee.
Thomas, J. S., Milwaukee.
Thomas, J. S., Milwaukee.
Thompson, A. S., Mt. Horeb.
Thompson, A. S., Mt. Horeb.
Thompson, B. V., Oshkosh.
Thompson, F. A., Milwaukee.
Thompson, F. A., Milwaukee.
Thompson, J. B., Wittenberg.
Thompson, J. B., Wittenberg.
Thompson, J. B., Wittenberg.
Thompson, J. B., Wittenberg.
Thompson, W. L., Oakfield.
Thorndike, William, Milwaukee.
Thorne, James P., Janesville.
Thrane, A. D. H., Eau Claire.
Thompson, W. L., Oakfield.
Thorndike, William, Milwaukee.
Tibbits, V. J., Waukesha.
Timm, E. W., Milwaukee.
Tibdits, V. J., Waukesha.
Timm, E. W., Milwaukee.
Trei, E. A., Green Leaf.
Tkadlee, Joseph, Lime Ridge.
Todd, Samuel, G., Xeenah.
Tomkiewicz, Irene G., Milwaukee.
Tompach, Emil, Racine,
Tormy, Thomas, Madisou.
Torpy, T. G., Minocqua,
Towne, W. H., Schiocton.
Treat (harles R., Sharon.
Treat (harles R., Sharon.
Treglown, L. H., Livingston.
Trevitt, Margaret, Wausau,
Trowbridge, Charles, Viroqua,
Tryon, F. E., Merrimae.
Tryolhifge, C. A., Kilbourn.
Treat, Charles R., Sharon.
Treglown, L. H., Livingston.
Trevitt, Margaret, Wausau,
Trowbridge, Charles, Viroqua,
Tryon, F. E., Erond du Lac,
Twohig, F. J., Fond du Lac,
Twohig, F. J., Fond du Lac,
Twohig, F. J., Fond du Lac,
Twohig, R. J., Tond du,
Tan, C. C., Iron Belt,
Van Althena, L., Jr., Cedar Grove,
Vanderlinde, L. A., Wautoma,
Van Kirk, F. W., Janesville,
Van Schiack, R. E., Caroline,
Van Valzah, Robert, Madison,
Van Watsrieuen, A., Kenosha,
Walle, H. J., Googen, Sale.
Waller, F. W., St. Croix Falls,
Walker, F. W., St. Croix F

Waters, D., Grand Rapids.
Waters, Hugh, Nekoosa.
Watson, Fred V., Antigo
Weaver, L. A., Iron Belt.
Webb, E. P., Beaver Dam.
Webb, W. B., Beaver Dam.
Webb, W. B., Beaver Dam.
Webb, W. B., Rice Lake.
Webster, B. N., Rice Lake.
Webster, F. E., Amherst.
Wegge, Wm. F., Milwaukee.
Welek, F. E., Janesvine.
Welch, F. C., Mukwonago.
Welch, F. R., Janesvine.
Welch, F. C., Mukwonago.
Welch, F. C., Mukwonago.
Welch, F. C., Milwaukee.
Weneld, H. J., Campbellsport,
Wenker, R. J., Milwaukee.
Wenstrand, D. E., Milwaukee.
Wenstrand, D. E., Milwaukee.
Wenstrand, D. E., Milwaukee.
Wentzell, W. L., Stoughton.
Werner, G. F., St. Cloud.
Werner, H. C., Fond du Lac.
Werner, R. F., Eau Claire.
Westgate, H. J., Rhinelauder.
Westphal, H. G., Polar.
Westphal, H. G., Polar.
Wetzler, S. H., Milwaukee.
Weiplin, G. G., Rice Lake.
White, A. G., Milwaukee.
White, A. G., Milwaukee.
White, Moses L., Wauwatosa.
White, M. G., Plover.
White, W. E., Burlington.
White, W. E., Burlington.
Whitehorne, E. E., Vesper.
Whitney, D. C., Rice Lake.
Whyte, Wm. F., Madison.
Wichman, G. C., Rib Lake.
Whyte, Wm. F., Madison.
Wickman, G. C., Rib Lake.
Wise, Frank S., Fond du Lac.
Wilkinson, John A., Hales Corners.
Wilkinson, John A., Hales Corners.
Wilkinson, John A., Hales Corners.
Wilkinson, M. R., Oconomowoe.
Wilkowski, C. W., Chippewa Falls.
Willard, C. J., Wauzeka.
Willard, C. J., Wauzeka.
Willard, C. J., Wanzeka.
Willard, C. J., Wanzeka.
Willard, C. J., Marinette.
Williams, Maud, Milwaukee.
Williams, M. H., Sparta.
Williams, W. E., Cambria.
Williams, W. E., Cambria.
Williams, W. F., Cambria.
Williams, W. F., Aryle.
Williams, W. F., Sheboyan.
Wiete, H. A., Green Bay.
Wood, F. C., Wandaca.
Wolff, Jacob, Milwaukee.
Zinns, A. J., Milwaukee.
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### **BOOK REVIEWS**

CANCER: ITS STUDY AND PREVENTION. By Howard Canning Taylor, M. D., Gynecologist to the Roosevelt Hospital, New York; Professor of Clinical Gynecology, Columbia University; Member American Society for the Control of Cancer, etc. 12mo, 330 pages. Cloth, \$2.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The cancer problem is now receiving intensive study from many sources. Renewed interest seems to have been given to the subject in the past few years. The literature has grown to enormous proportions. Laboratory workers, clinicians, surgeons, statisticians, social workers, have all been writing in and out of season.

The fact is that the increase of cancer is not only apparent, but real. As the author of this little books says "No larger problem in public health confronts the medical profession and the laity of the civilized world today than that of cancer."

Dr. Taylor's book is an attempt to put together facts gleaned from all sources in acceptable form. The book of 323 pages is divided into thirteen chapters, and into these chapters the author has condensed much information, particularly valuable to the medical student and interested layman. A great amount of literature has been consulted, and the most widely accepted views are presented at the best conclusions for the time being.

In the chapter on heredity, we miss a resumé of the remarkable experiments of Dr. Maude Slye with tumors of mice. Her reports are rather recent, and undoubtedly were not available until after the book was in press.

Altogether, we should like to recommend this little book to the attention of the profession. We believe that it would be a safe volume to place in the hands of an enquiring layman. There is not enough pathology to hurt such a person, and only the briefest outline of symtoms of cancer and sarcoma in the various regions of the body.

It answers many questions put to us constantly by our patients in a very terse and authoritative manner.

The book is well printed and, in spite of its condensed sentences, is fairly easy and interesting reading.

L. M. W.

The Cancer Problem. By William Seaman Bainbridge, M. D., Maemillan & Co., New York, 1915.

The author of this book has performed a signal service to the determined fight against caneer. In spite of the voluminous literature of all phases of the problem, he has had the conrage to attempt the review and condensation of the many features. He has given us not only a book replete with interesting facts, but written in a style which makes the reading of it enjoyable.

In a way, the book is a popular one, that is to say, it could be read with interest and profit by physicians, although written more from the standpoint of the layman.

The subject matter which the author covers is wide. Beginning with the Ancient History of Cancer, he traces the History of Modern Cancer Research. The chief institutions devoted to the eare of cancer patients and to research work in cancer are briefly described. The General Distribution throughout the Flora and Fauna is deseribed, together with the Geographical and Ethnological Distribution. This is most interesting reading. The Section on Statistical Considerations is most carefully selected. His general conclusions as to the increase of eancer are that "there has been a great increase in the total number of deaths recorded from eancer, partly due to improved certification of causes of death and improved diagnosis, and also because more people nowadays attain to ripe years. This must not be confounded with the question of a relative increase. When the figures are analyzed, it is shown that there has been no relative increase from some parts of the body, for example, skin, uterus, ovary, liver, but that for other sites, notably stomach and intestines, breast and tongue, there has been a relative increase." (p. 104.)

He discusses Etiology, giving a resumé of all the important theories. A chapter on Histopathology, more in a popular vein, but, accompanied by a number of excellent illustrations, gives the essentials.

Two most entertaining sections are one on Caneer Research—A Resumé of the World's Work—and the section on "The Investigation of Caneer Cures." His final word is The Outlook in which he briefly sums up what seems to be really known, makes a plea for early diagnosis, and thorough surgical removal, and feels that when all is said we are "traveling hopefully."

This is only a rough sketch of Dr. Bainbridge's book. It should be in the library of everyone, lay or medical, interested in the Caneer Problem. As a reference book for field workers and lecturers, it certainly should be invaluable. For the physician who is called upon to answer the numerous questions put to him, it will be a great help.

A very extensive, but naturally not a comprehensive, bibliography of fifty-two pages is found at the end of the book. The references are divided into sections dealing with separate subjects, and the authors are alphabetically arranged. An author and a general index completes the book.

L. M. W.

CANCER: ITS CAUSE AND TREATMENT. By L. Duncan Bulkley, A. M., M. D., Senior Physician the New York Skin and Cancer Hospital. Svo., cloth. 224 pages. Price, \$1.50, net. postpaid. Paul B. Hoeber, Medical Publisher, 67-69 East 59th Street, New York.

This small book is a collection of lectures given by the author at the New York Skin and Caneer Hospital, and represents the conclusions of forty years' observation and study of his cases.

He is convinced that cancer patients receive too little medical treatment. He favors removal and other well recognized methods of dealing with cancer, but he insists upon a "perfect vegetarian diet, which excludes even eggs and milk. "The yolk of eggs may sometimes be taken with advantage, and also milk alone and separate, at a body temperature, one hour before eating."

There are six lectures: Nature of Caneer; Frequency

and Geographical Distribution of Cancer; Metabolism of Cancer; Relation of Diet to Cancer; Medical Treatment of Cancer; Clinical Considerations and Conclusions.

Whether or not one agrees with the author is immaterial. The book is interesting, because it develops a view-point quite at variance with the generally accepted ideas of cancer therapy.

L. M. W.

STUDENTS' MANUAL OF GYNECOLOGY. By John Osborn Polak, M. Sc., M. D., F. A. C. S., Professor of Obstetries and Gynecology, Long Island College Hospital; Professor of Obstetries in the Dartmouth Medical School; Gynecologist to the Jewish Hospital; Consulting Gynecologist to the Bushwick, Coney Island, Deaconess' and Williamsburg Hospitals, Brooklyn, and the Peoples Hospital, New York; Fellow American Gynecological Society. 12mo, 414 pages, illustrated with 100 engravings and 9 colored plates. Cloth, \$3.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

This Manual of Gynecology is illustrated with 100 unusually good engravings and 9 colored plates. For a manual of this nature the book is exceptionally complete. The subject material has not been sacrificed for brevity as is often the case in such compendiums. The chapter on menstruation contains two folding plates on uterine hemorrhage which graphically set forth the various types of such bleeding. These have been well chosen, and have been of great value to the reviewer as an aid in differential diagnosis of hemorrhage from the uterus. The illustrations are large and well chosen to show instrumentation in the various operative procedures described in the text. The chapter on displacements of the uterus and their treatments, especially the non-surgical methods or pessary treatments of retroflexion, is very well written and illustrated. This book seems to the reviewer to be the best of its nature that has come to his attention and as such it merits especial consideration, not only as a text for students, but as a complete and accurate guide for the physician practicing gynecology.

#### **ABSTRACTS**

ON BILATERAL HEMIANOPSIA WITH PRESERVED MACULA. Rönne, Henning, Copenhagen, (Klin. Mon. f. Aug., 53, p. 470), reports the following ease with post mortem examination: In a woman, aged 66, suddenly bilateral hemianopsia developed with preserved macula so that a visual field with a radius of 2° remained, V 6/18, fundus normal. The right half of the visual field was successively restored, leaving a left sided hemianopsia with a macular preservation of 1° and V 6/6. The autopsy revealed an involvement of the whole lingual lobe, the lower half of the euneus, parts of the apex of the oeeipital lobe and fusiform lobe of the right hemisphere, extending to the splenium of the corpus callosum. In the left hemisphere was a very small pigmented cicatrix in the inferior longitudinal fasciele just in front of the entrance of the visual path into the external geniculate body, 6.5 em. before the occipital apex. R. assumes that the apoplexy in immediate proximity of the left visual

path produced by distant action the transient right hemianopsia, which later subsided after absorption of the hemorrhage. Naturally the peripheral and macular fibres of the path were influenced, the former so intensely that their function was temporarily abolished. In the latter, essentially on account of the pre-existing higher function of the macula, the effect was only a decrease of vision to about 6/18, which would correspond to an elimination of about 7/8 of all macular fibres.

The ease agrees well with the view of Roenne, propounded in Klin. Mon. f. Aug., Sept. 1911, that the so-called macular preservation represents only a rest of the lacking half of the visual field, due to the magnitude of the supposed macular center in proportion to the corresponding part of the retina and area of the visual field, whereby the chance is greater that a part of the macula is spared than of the periphery. R. further assumes, that perhaps the macula only appears to escape more frequently than the periphery, because it is the place where a remaining function can be proved longest. A similar decrease of vision in the whole half of the visual field, a hemiamblyopia, must in a certain number of eases bring the periphery below the threshold of excitation, but leave the macula free.

C. ZIMMERMANN.

Transitory Hypermetropia in Diabetes. Rönne, Henning, Copenhagen (Klin. Mon. f. Aug., 54, p. 207). A woman, aged 47, who for a month had suffered from great thirst and weakness, showed 8% sugar in the urine. After about a week she suddenly noticed on awakening in the morning that her vision for distance and reading was considerably diminished. Four weeks later she consulted R., who found hypermetropia + 3, V 6/6. With +4 she read the finest print. So far she had +1. for reading, so that the accommodation and the normal value corresponding to her age. After a fortnight she suddenly could not see any more with her glasses, and had now normal vision with +0.50. The sugar had disappeared under strict diet.

The case corresponded with all other cases published, in which the hypermetropia was always transitory for from one to two months, subsiding gradually, but deviated from them by the sudden disappearance of the hypermetropia.

R. assumes the following explanation: Diabetes might successively ereate ehemical changes of the lens substance leading to latent abnormal tension in the lens fibres. If this reaches a certain point it suddenly exceeds the shape imparting forces and alters the position of the strata of the lens to each other without mutation of the external surface, producing so to speak a negative intracapsular accommodation. This may be compatible with the persistence of the accommodative faculty, corresponding to the age, and may explain that the change of refraction seems to occur only in individuals of about 50, as a certain proportion between consistency of the lenticular nucleus and cortex might be a necessary condition or a favorable element for the supposed changes of tension. This theory would require changes of the spherical aberration of the eye during the

hypermetropic condition which might be tested by aberroscopic investigations or Jackson's sciascopy with luminous point. R. thinks that these conditions are not very rare and often are overlooked.

C. ZIMMERMANN.

CONTRIBUTION TO THE RELATION BETWEEN ACUTE RE-TROBULBAR NEURITIS AND MULTIPLE SCLEROSIS. Tarle, Jacob, (from the eye clinie of Prof. von Schleich in the University of Tübingen. Klin. Mon. f. Aug., 54, p. 412), reports on 29 new cases, observed at the clinic since the publication of Fleiseher in Klin. Mon. f. Aug., 46, p. 113. Only acute cases with the typical clinical picture were considered, excluding the not acute cases with more chronic course, deviating from the typical aspect and all due to affections of the orbit and nasal sinuses and intoxications. Two-thirds of the cases were females, more than two-thirds of all, three-fourths of the female, oecured at the age between 15 and 30. The average age of men was 29, of women 27. As causes were stated: overexertion, slight febrile diseases, disturbances of the nervous system, loss of blood, acute infectious diseases. In none the affection was distinctly attributed to cold.

The course of the disease in most cases was typical: Vision was suddenly impaired by a more or less dense fog. First a central scotoma for colors, then a relative and later absolute central scotoma for white was found which rapidly spread, leaving remnants of the peripheral visual field or even amaurosis. In 24 cases vision was very much reduced. The amblyopia lasted from a few days to about four weeks, and disappeared in the same way it eame. First the peripheral portions of the visual field are restored, then the central scotoma grows smaller, finally more or less marked scotomas, absolute or relative, remain or vision becomes normal. This occurred in 11 cases, good central vision for white but central disturbances of color perception and paracentral sectoma in 6, moderate central impairment of vision with scotoma in 7 cases. In 5 ambulant patients the final result could not be ascertained.

Other ocular symptoms were: pain in moving the eyes and upon pressure, especially at the beginning; pupillary disorders were frequent, inequality of the pupils occurred in 8.

The affection was bilateral in 4 eases, in 1 one eye became affected after the other. No palsies were observed, but in some cases the anamnesia printed to their precedence, nystagmus in 2 cases.

The ophthalmoscope revealed different conditions: no changes in the beginning in 4, in most cases from the start various degrees of deviation in color and contours, i. e., inflammatory, in 2 marked swelling of the disc and intense venous congestion. At the final observation pathological conditions invariably were found; different degrees of postneuritic atrophy, partly marked pallor of

the temporal half of the disc, from which the cases with restitution of normal vision were not excluded.

F.'s investigations again confirmed the great importance of acute retrobulbar neuritis as valuable early symptom of multiple sclerosis. Not only the observation of the further fate of the patients, affected with retrobulbar neuritis, but the careful examination by neurologists of these cases at the beginning of the ocular affection proved that more than one-third of them and, if those with probable diagnosis are included, more than half presented simultaneous other neurological symptoms, which with the eye disease established the diagnosis of multiple sclerosis.

C. ZIMMERMANN.

ON DIFFERENT FORMS OF CARCINOMA OF THE LIDS. Palich-Szanto, Olga, (from the eye clinic of Prof. E. von Gröss in the University of Budapest. Arch. f. Aug., 79, p. 18), gives a review on the different forms of careinoma of the lids, their origin from the epidermis or its glands and frequency, with reference to the large essay of Mayeda in 1903, and the views with regard to their genesis, and reports the clinical histories of 12 cases. These were all basal cell earcinoma, from which P. concludes that careinomas of the lids are predominantly basal cell earcinomas, in which the deepest layer of the epidermis commences to proliferate, distinguished from carcinoma spinocellulare which arises from the spinous cells of the epidermis, according to the classification by Krompecher, based on the histogenetic principle.

C. ZIMMERMANN.

CONTRIBUTION TO THE CLINIC AND PATHOLOGICAL ANAT-OMY OF RODENT ULCER OF THE CORNEA. Epalza, Enrique, Bilbao, Spain, (from the eye elinie of Prof. Th. Axenfeld in the University of Freiburg. Kiin. Mon. f. Aug., 54, p. 266), gives the clinical history of a case of rodent ulcer of the right eye of a man, aged 23, which had to be enucleated on account of exeruciating pain, and describes the histological changes. The effection commenced with an infiltration of the limbus, which suggested like in episcleritis a possible hematogenous origin, but there was no thrombosis in the episeleral vessels. The whole process did not make the impression of a primary necrosis of the cornea, but that an immigrating granulation tissue corroded and destroyed the cornea, both processes being due to a common infectious cause, perhaps an infectious episelcritis.

In another ease an intercurrent diplobacillar infection had a beneficial effect. As this infection can be fairly controlled by zinc, the attempt of a bacterio-therapy seems indicated and is planned by Axenfeld in future cases.

C. ZIMMERMANN.

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## ORIGINAL ARTICLES

ANNUAL ADDRESS OF THE PRESIDENT OF THE STATE MEDICAL SOCIETY OF WISCONSIN.\*

BY T. J. REDELINGS, M. D.,

MARINETTE.

My first desire is to express to you my gratitude and humility. My gratitude for the great honor you have conferred upon me by electing me your president and bestowing upon me the greatest gift in your power; my humility because I am overcome with a consciousness of my own limitations and fear that I shall not be able to maintain the high standard which has been established by that galaxy of venerable men who have preceded me as standdard bearers of this great society. Profoundly grateful for so signal, though unmerited, an honor, I shall ask you to sustain me until I shall have transferred it, without loss of luster, to the hands of my successor.

In presenting my thoughts to you I contemplate a brief review of the evolution of our art by the eitation of the names of a few of the men whose lives adorn the historian's pages and a few matters of interest pertaining to the present status of medicine in this state, hoping that some action may result therefrom which shall redound to the good of humanity and the exaltation and rehabilitation of our profession.

The medical profession has a noble heritage to sustain. From the days of Hippocrates and Galen, no type of man has more enduring claim to our grateful remembrance for his beneficent service to humanity, than the physician. His life and work have divided time into epochs,—epochs which gave to mankind a new literature, to science new discoveries or expounded a new philosophy of life.

Among the early English physicians Linacre was a literary genius, who to his time restored the Greek medical thought of the dawn of history. Harvey was of the type of scientific and practical physician. Thomas Sydenham was the English Hippoerates and John Locke's philosophy has changed the destiny of man.

I ask your indulgence for time hastily to enumerate just a few of the names of the men whom we are pleased to honor in the more modern history of medicine, men whose lives and works made an enduring impression and who, escaping the thrall of nationalism, became cosmopolitan teachers and leaders.

John Hunter of London was a pioneer in anatomy, surgery and pathology. Louis of Paris first began the statistical study of disease and his methods modified the medical thought of two continents. Virchow, Langenbeck, Billroth, Nothnagel and Charcot were stellar lights in the early part of the nineteenth century and blazed the way for a new science and art of medicine; but the crowning efforts for the birth of a new school of medicine and surgery came from the laboratories of Robert Koch and Louis Pasteur, whose labors and researches gave form and application to the science of Bacteriology and unveiled the mysterious cause of disease and the mode of its transmission.

Inspired by the writings of Pasteur, Joseph Lister began the antiseptic treatment of wounds. "Suffice it, that time brought important modifications in his practice but not in his theory. Particular antiseptics came and went, the carbolic spray was used and banished. Air was found to be not a dreaded enemy and earrier of disease, but a kindly friend when properly entreated; surgical cleanliness, a germ-free environment, became recognized as the one thing needed. Heat, soap and water, the nail brush, alcohol and a few simple chemicals took their place in our armamentarium and asepsis supplanted antisepsis, but the great underlying truth remained; that wound-infection comes from without the wound, that it flourishes

<sup>\*</sup>Delivered at the Sixty-ninth Annual Meeting of the State Medical Society of Wisconsin, Milwaukee, Oct. 6, 1915.

under appropriate conditions, that it may be eliminated by appropriate measures." Lister devoted his life to the convincing of his followers of the truth of the germ theory of putrefaction. Volumes have been written to celebrate this theme, but my feeble pen can but echo its eulogies.

The early history of medicine in the United States has contributed its quota of men whose lives and work have illumined the heritage we cherish. In Colonial times Benjamin Rush, John Jones, William Shippen, Jr., John Warren and Philip S. Physick were men widely known for their professional attainments and patriotism. With the birth of the new nation medical men of renown rapidly increased. Many of the pioneers were peripatetic teachers. Foremost among them were Daniel Drake, Bartlett, T. R. Beck, Willard Parker, Alonzo Clark, the elder Gross, Austin Flint, Frank H. Hamilton and Nathan Smith the founder of the medical schools of Dartmouth and Yale. These radiant lights in the medical profession of this country were quite generally men of high educational attainment and received their medical training in England, France or Germany.

Were I to include the names of the men now living among those whom we would delight to bonor, their labors and achievements by comparison would appear like the light of a tungsten nitrogen lamp compared to the light of a tallow candle.

I have hastily summarized this brief historical sketch to assure you of my high appreciation of the great honor which our profession must maintain and perchance surpass, and to mitigate anything which I may say in apparent deprecation of the present status of the medical profession of this state. Medical education in this country was conducted by individuals for more than a century. The laboratory and the dissecting room belong to a later organization. Our population increased so rapidly that medical aid was very much needed. This gave rise to the private medical school, which was sometimes controlled by individuals of very limited training. One man sometimes filled the several chairs in the school. These schools were under no control and thrived or fell by the wayside as financial success was won or lost. They increased amazingly in number. The century just closed records 198 medical institutions as having existed. At the beginning of the twentieth century there were in the United States more than one hundred and sixty medical schools; most of them of low

grade when compared to European standards of medical institutions.

state, and a number of other states, have enacted

laws which reflect odium upon our profession. It

is needless to recall to you the specific charges

May I remind you, too, that in recent years our

which caused the enactment of this noxious legislation, but pondering ask, has ours, the noblest profession which serves humanity, deteriorated, or is it the victim of invasion by the charlatan and quack, who with a suave manner, a glib tongue, a press agent and an all too easily acquired diploma, have violated the trust reposed in us? Has the spirit of altruism which should rule the heart and mind of every true physician, been replaced by a vulgar commercialism, which gives any kind of service for a few pieces of silver? Or have we suffered from the propagandists of isms, pathies and religio-medical cults which are more actively engaged in the education of the public through the press and pulpit of their unproven healing art, than are we in spreading established truth? Or are we conveying an exaggerated idea of our powers to modify or control the course of disease? If we are, we are not worthy of the title "Doctor." Doctor primarily means teacher and he who teaches falsehood is not worthy to be heard. Or are we sending our surgical patients to the hospital "to be fixed up," as we would send a broken plowshare to the blacksmith, in a spirit of levity and with a promise of a perfect result, undervaluing the possibly unavoidable serious consequences which may complicate even a simple surgical procedure? Then the result not measuring up to our promise and the patient's reasonable expectation and forming a pretext for an ambitious attorncy's attack, we are confronted by an effort to recover in law. Or are we injuring the repute of medicine by thoughtlessly or willfully slandering it? or by exploiting it purely for profit? Whatever the cause, a casual observer may recognize a very general distrust in medical men and their methods. This is a lamentable situation. It is, however, not impossible of correc-

As I have gone about the state visiting County, District and State Societies it seems to me there is a pressing need for a wider activity of the State Scoiety. The organization of the members of the medical profession into this society was primarily for the purpose of service: a service first to its members and through them to give to humanity

relief from the suffering entailed by disease, and enlightenment in matters relating to public hygiene and the prevention of disease. By this relief from disease and suffering, man will advance to a higher level, physically, morally and intellectually. If these are not the basic functions of this society, our efforts have no purpose.

A wider view of the service of medicine has made it necessary for this society, as a body, to oppose eertain evil conditions that have arisen, which cannot be successfully resisted by the separate action of the individual. The most important of these evils is the commercial exploitation of the sick for the sake of pecuniary gains. The charlatan has invaded our ranks, but the most evident and extended form of this exploitation is to be found in the patent and proprietary medicine business. Here the physician is often made an unconscious dupe and accessory to the exploiter. Efforts directed towards the correction of these evils will be costly both in time and money and the practical results will seem small in proportion to the efforts set forth, but a way must be devised by which the credulous may be safeguarded against these exploitations. These evils have insidiously but gradually developed in our midst.

"It is interesting to note how rapid has been the advance in knowledge of diseasc and how recent the full recognition and application of this knowledge to its prevention and cure. Forty years ago the conditions of medical practice were essentially the same as at the time of Sydenham. We possessed a few great therapeutie agents whose use had been learned empirically. Shortly before this period ether and chloroform had been placed in our hands. The anatomic knowledge of disease, which has made possible a closer differentiation of types and clearer recognition of the changes produced in the body, was relatively further advanced than either functional or etiological knowledge. There was little recognition, save in a few great minds in the profession, of the true nature of disease. Disease was generally regarded as a condition foreign to the normal life, as a new action which had come into the individual, and the natural eourse was not understood. Treatment was largely symptomatic and remedies were sought to combat the symptoms rather than to meet the underlying eauses. There is a natural feeling in the human mind that some remedy must exist against every We see this in the numerous laws which are quickly passed to remcdy unusual and abnormal conditions in the body politic and we too often see how obscure are the underlying conditions and how inadequate the remedy. Owing to the lack of appreciation of the natural course of disease, faulty empirical methods of treatment had arisen, many of them useless, some harmful.

"Meanwhile slowly and by short steps, a mass of knowledge founded on accurate observation of disease and irreconcilable with blind and unreasoning therapy was being accumulated.

"The final blow to the old conception of disease and to the old empirical therapeutics was given by the discovery that most diseases are due to the entry into the body of living things which prey on it and produce disturbances in its normal action. The year 1880 which marks the firm establishment of the new eonception, is to be regarded as the beginning of one of the great periods of medicine; probably the greatest. What was previously a hypothesis became knowledge. The period was fertile in the discovery of new methods; bacteriology became a new branch of medical science, and in all directions the new knowledge was enormously stimulating. By the necessary association of the experimental study of disease with the determination of the part which the infectious organisms play, experimental methods received a new impetus and were carried to new fields. With the knowledge of the eauses and their mode of action, it became evident that disease could be more easily prevented than cured. Preventive medicine was born.

"What was probably most important, the new knowledge had an immense human interest; it became popularized by means of newspapers and magazines, and for the laity as well as for the medical profession disease, for the most part, lost its mystery and became a part of the natural order of things."<sup>2</sup>

Nor were the physicians who came into the profession a generation ago the victims of low grade medical schools alone. The last quarter of the nineteenth century will go into history as notorious for the number of medical journals which it produced. "During the forty years following the civil war no less than 944 journals were started. Many of them were short lived but many survived; there are in existence now approximately 325 medical journals. Most of them inadequate to their task of leadership. Many of these journals depended for their support on advertisements. The publisher

relied on the advertisement of proprietary medicine to such an extent that almost of necessity he became the tool of the manufacturers of these medi-The most dangerous form of advertising consisted in recommendations by members of the These took various forms, one, the profession. favorite, being an article which on the face of it was a scientific contribution to the knowledge of some disease, but which in reality was written to extol some proprietary preparation. Some of these endorsements were undoubtedly honestly given, the judgment of the writer being at fault; others were entirely a matter of barter and sale, some men seeming to make these endorsements a part of their business. At best, all of them were based on uncritical data, and as scientific contributions were valueless."2

The admirable work of the Council on Medical Education of the A. M. A. has radically changed the manner in which doctors are now trained. Of the remaining one hundred medical schools, eighty-four (possible more) are now requiring one year or more of college work as entrance requirement and all have in a measure at least strengthened their curriculum. The splendid results of the efforts of the Council on Pharmacy and Chemistry of the A. M. A. have made the path of the patent and proprietary medicine faker so turbulent that he is finding it difficult to purchase advertising space in any reputable medical journal and in some of the more progressive secular periodicals.

The work of reorganization in this state has been decidedly constructive. We still feel the benign influences of Dr. McCormack's message of brotherly love and fraternal spirit. A review of the annual transactions of the State Society shows a great change in the character of the material presented for its consideration at the annual meeting; a change which shows that the march of progress has been ever onwards. The discussions of empirical methods have been replaced by treatises on research and scientific discoveries, advanced medical and surgical thought. The haze of mystery has been dispersed by the light of truth and science. Numerically we have enrolled as members about three-fourths of the physicians in the state. This is a larger proportion than any other state can claim. I should like to see our membership increase, but I am more desirous that our membership shall be a quality membership than a quantity membership.

My special message to you this afternoon shall be a plea for a greater service on the part of the State Society. A service which shall be direct to its members.

There are many worthy men located in remote parts of the state who feel that they cannot leave home to do graduate work. These men may grow by their personal efforts but feel keenly the loss of opportunity to meet the master minds. Fully onehalf the counties in the state are not able to maintain a live medical society doing real scientific work -some of them from lack of numbers, some from difficulties in transportation, others for local reasons not easy to present at this time. The published program of the county society sometimes fails, when perhaps several are present at a great sacrifice in time and hardship in travel. I have observed that the meeting with a social feature and the one announcing special talent from abroad calls out the largest attendance and reaches the men from the out points. I would not under-rate the value of the social gathering of physicians; these meetings promote harmony and the spirit of goodfellowship, but it is the leaven of science which needs to be spread abroad among our fraternity. My contention is that the state society, through its executive officers should assume a guiding hand in directing a part at least, of the scientifie work which should reach the physicians throughout the state. It occurs to me that it is possible for the state society to send clinical teachers who are versed in the latest clinical methods and aids in diagnosis on an itinerary of the state, arranged by the secretary of this society, co-operating with the secretaries of the county societies, together with the councilors. The expense of such itinerary to be paid in part from the general funds in our treasury.

I would recommend that a committee of five be appointed to be known as the Committee on Education, that two members be selected from the faculties of each of our medical schools and the fifth from the society at large. This committee shall select the talent which shall do this educational work and arrange the details. I realize that this is along the line of work already contemplated by the University Extension Department, and hope that it may be possible to unite the efforts of this society with those of the University in a common cause, thereby systematizing and making the efforts of both more effectual.

The activities of the Public Speakers' Bureau and the Press Bulletins of the A. M. A. have done much to enlighten the public on the present status of the cancer problem, the character of tuberculosis and its prevention, the conservation of vision and matters pertaining to public health and the prevention of disease. The popular periodicals are publishing many articles on the progress of science and medicine, so that the reading laity is well informed. Metchnikoff's and Ehrlich's theories are themes upon which we are interrogated at sick calls and in the parturient chamber we are upbraided for not inducing the twilight sleep and are reminded that Dr. Reed now selects the birthday hour.

In his address before the house of delegates at San Francisco, Dr. Vaughan said: "Medicine is advancing so rapidly that men, even among the recent graduates of our best schools, are failing to keep up with the times." If this be true, then it behooves us to find a remedy with which to quicken the profession of this state. The basic principles upon which this organization was erected, were a firm declaration "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 guard and foster the material interest of its members and protect them against imposition; and to enlighten and direct public opinion in regard to the problems of state medicine, so that the profession shall become more capable and honorable within itself, etc."3

The efforts of this society to obtain through our legislature laws which will protect the credulous against the incredulity of the irregulars, may have accomplished some good, but their effect upon the section of the state with which I am most familiar has been a dismal failure, measured by any standard of efficiency.

This has not been due wholly to the character of the laws. We enact laws, spread them upon our statutes and they remain there as dead as if interred in a cemetery. True the laws which we have obtained have regularly entailed greater hardship and demanded higher efficiency of the young who contemplate entering our ranks. This is eminently proper. We know that "Medicine is seen at its best in men whose faculties have the highest and most harmonious training." Yet a man entering the profession "has few things harder to bear,

until he has become well accustomed to it, than to be conscious of ability, integrity and worth, and see the ignorant pretender, the faker, or the charlatan preferred in his stead." What may be done to rid ourselves of the lawless intruders of our profession? It is obvious that the body politic will not act, and that it does not distinguish sharply between the man who has honorably acquired the title "Doctor" and the man who has assumed it. There are throughout the state a large number of individuals engaged in the practice of medicine who are not properly licensed, but who prefix the title "Doctor" to their names. By a great variety of intrigue they are purloining from their patients large sums of money.

The Medical Society of the County of New York has taken a long step towards the solution of this problem. This society maintains a paid individual to obtain evidence against these impostors and to aid in their conviction. The State of New York recognizing the efficient work of this society has enacted a law which gives the fine obtained from convictions to the society. These fines defray about one-third of the expense, the County Society meets the difference. I would like to recommend that our State Society take a similar step and that we endeavor to obtain a law which will give us the same aid. No greater service can be rendered to protect the credulous whose ranks are recruited from all walks of life.

I realize that these recommendations will create new activities and if acted upon will necessitate the expenditure of money, and that our exchequer may need replenishing. This can be met by voluntary contributions, the contributors to be enrolled as sustaining members. Our habits and customs change very slowly but their unmistakable tendency must be towards a better and stronger organization.

I have said much about possible evil tendencies and conditions but I am also mindful of the great worth of the men who are upholding the honor of our profession with a self-sacrificing devotion and loyalty. I covet for them a more equitable economic relation with their patients, whose rights must be honestly conserved.

The reports from the United States revenue office will show that less than five per cent. of the families in this country have incomes over \$3,000. Outside of that small group the cost of efficient medical aid in case of scrious illness is either pro-

hibitive or ruinous, or at best a serious hardship. Those who are fortunate enough to serve the selected few may receive their fees with throbbing heart-strings. But the conscientious physician who must cater to the millions cannot help recognizing that frequently the fee which he should receive is required by the patient for the purchase of necessary food and care.

The rank and file of humanity have sought relief from what to them has seemed a burden, through the organization of fraternal societies, industrial insurance, and life and aecident insurance. Certain large corporations have adopted various forms of industrial pensions for invalidity and old age. More than half the States of the Union have enaeted laws creating workman's compensation in aeeidental injury. All these organizations have but one idea and that is to have the community bear the burden of the individual's misfortune in accidental injury or in sickness. They are a lot of disjointed insurance schemes. In whatever country the social equilibrium has been upset by laws on eompensation, there have followed in the wake of the compensation for accidents other insurances tending towards the complete insuranee systems of England and Germany. In a recent article in the Journal of the American Medical Association, Rubinow states definitely that for two years there has been under consideration a state sickness insurance law to be presented to the various legislatures in the near future. It is evident, therefore, that onee the old social equilibrium has been upset, society tends to follow to the logical conclusion until it reaches a new equilibrium under a new social system.8 The dawn of a new social relation is faintly glimmering. "We should be leaders in this movement, who see ahead of our generation but who have the wisdom to walk and work in it." For the carrying out of any scheme tending to human betterment, the medical profession must necessarily be included.

It is possible that within a decade laws may be enacted creating state medicine and this will not be a large step from state compensation for accidental injury. It will be advisable to have this movement inaugurated by the medical profession rather than have it thrust upon us from without. The relation of the physician to compensation is so intimate that we as a profession should be most capable to work out its intricacies, in equity to humanity and with honor to ourselves. It is, how-

ever not my purpose to discuss state medicine except to remind you that the study of its evolution should become a part of this society's activity.

While I have reminded you that commercialism is rife in places, that the charlatan and the humbug are disguising themselves under the title doctor, they are not of us, but in spite of us.

A study of the history of medicine shows that our great problems were no different nor less difficult to our forefathers. "For all time (in the opinion of the multitude) witches, old women and impostors have had a competition with doetors." Education of the public of a much more systemaetic and active kind is needed. Exposure of quackery and its methods is the demand of the hour.

We are building our structure, the medical profession, with an eye single to but one purpose, that is, everlasting Truth. Truth whose luster grows brighter and more honorable with each receding year, meanwhile our patients are blindly worshiping at false shrines and some of them deride us when we have given them all our Art can give, because we have given less than their eredulity expects.

"So many gods, so many creeds,
So many paths that wind and wind,
When just the art of being kind,
Is all this great world needs."

Dr. Da Costa has aptly said: "We are all brothers, marching shoulder to shoulder in the army of healing. We have the same banner, the same hopes and aspirations. We follow as the pillar of smoke by day and the pillar of fire by night, two objects—the mitigation of human suffering and the prolongation of human life."

In the preceding remarks I have pointed out some of our shortcomings and have pleaded for a blameless efficiency. Are the defects in us or are they in those who should trust us? I shall not judge.

"In men whom men condemn as ill,
I find so much of goodness still,
In men whom men pronounce divine,
I find so much of sin and blot,
I do not dare to draw a line
Between the two, where God has not."

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# DISTURBANCES OF THE CENTRAL NER-VOUS SYSTEM ACCOMPANYING PER-NICIOUS ANEMIA. REPORT OF TWO CASES.\*

BY ARTHUR W. ROGERS, M. D.,

#### OCONOMOWOC.

Since Addison first so classically described the symptom-complex then termed idiopathic anemia, little has been added to our knowledge of the condition subsequently termed, "Pernicious or Primary Anemia."

Excluding the characteristic deterioration of the blood, pernicious anemia can scarcely be said to have a well defined pathology at this time. Its etiology remains obscure. The causes mentioned by the text books: oral sepsis, gastro-intestinal disease, parasites, syphilis and pregnancy, fail to convince many of the profession of the relationship of cause and effect. Its therapeutics continue empirical.

...The increased efficiency in laboratory methods developed during recent years has taught us that pernicious anemia is not the unusual malady that we have so long considered it.

We have witnessed a developmental process regarding the symptom complex of this disease and a new group of symptoms of nervous origin have so greatly arrested our attention as to cause us practically to reform our ideas of its pathology. Cabot¹ in describing pernicious anemia remarks: "Is pernicious anemia best called a disease of the blood? So prominent are the manifestations and results of anemia in most cases of the disease that we are apt to assume that it is only the blood that is diseased. But the following facts suggest that the poison which decimates the crythrocytes exerts its influence on other organs simultaneously.

- "1. In some cases the spinal cord shows evidence of disease earlier and more markedly than the blood.
- "2. The fatty metamorphosis of the heart, liver and kidneys is not to be explained as the result of anemia.
- "It is must more likely that the anemia, the spinal cord lesions and the fatty changes are coordinate manifestations of the same unknown poisons.
- "3. The general symptoms—weakness, dyspnea, etc., do not always get better as the blood improves, nor worse as the blood deteriorates. In other words they are not due solely to the anemia. There is no doubt that the number of cases of pernicious anemia showing one or more lesions of the brain or cord is much larger than the statistics suggest. Those who have written upon this phase of the subject find spinal symptoms in a large proportion of all cases—a finding, which judging by the post mortem results, probably represents the truth."

I will not tax you with numerous references to the literature concerning the subject under discussion, but pause long enough to remark that since Starr, Sinkler, Eschner, Osler and Camp have called our attention to lesions of the nervous system accompanying pernicious anemia, reports of such conditions are appearing more frequently, indicating in all probability that incorrect diagnoses have too frequently occurred in the past.

In pernicious anemia the entire cerebro-spinal axis may be involved.

However, let us first consider those symptoms emanating from the spinal cord. James J. Putnam<sup>2</sup> of Boston makes the following clinical classification of the severe form of pernicious anemia:

"Selerosis of the posterior and lateral columns has been found in these nervous cases, and three groups are distinguished (a) those in which nerve symptoms appear late in the course of a case of obvious pernicious anemia: (b) those in which there are no nerve symptoms (except peripheral paraesthesia) during life, but obvious selerotic changes in the cord post mortem: (c) those in which the cord symptoms precede and overshadow the manifestations of anemia."

In the majority of all cases of pernicious anemia we have no symptoms that could possibly be referred to spinal disease except numbness, tingling or other abnormal sensations in the hands and feet. These discomforts are present in almost every case,

<sup>\*</sup>Read before the Chicago Neurological Society, Jan. 21, 1915.

even in some of those which have shown post mortem no changes in the spinal cord. Hence we cannot properly attribute them to any cord disease. "Aside from the paraesthesias, the cases with important spinal symptoms may be divided roughly into two groups: (a), those in which we have a spastic gait with increased reflexes and a greater or less degree of paralysis, and (b), those in which the symptoms are strongly suggestive of tabes dorsalis, the reflexes being diminished and ataxia prominent.

"In addition to these relatively advanced and complete pictures of spinal disease, there are many cases which show a variation of what might be called 'fragments' of the complete mental picture. For example, ataxia, or unsteady gait, with or without Romberg's symptom, was present in 25 cases. Lightning pains were complained of by two patients, who had no other signs of tabes. Girdle sensation was mentioned by five and loss of sexual power by four. The following paralyses are also mentioned: in the arm in two cases, one transient; the face and one arm in one case; hemiplegia in three cases, one of which was transient and one accompanied by symptoms of apoplexy; general convulsions were mentioned in five cases; twitching of the hands occurred in one case."3

"Sensory symptoms, with the exception of various paraesthesias, are rare. Occasionally a patient has intense pain in all the extremities, but this is very exceptional."

In considering the mental symptoms, we find ourselves unable to make any classification. The manifestations of cerebral disturbance may range from mild depression to profound melancholia; from slight exhilaration to distinct mania, and the one may repeatedly alternate with the other. Toward the end, disturbances of consciousness and deep coma may appear. In a number of cases failure of the memory and lasting impairment of intelligence have been noticed. In the majority of cases reported the mental picture has been one of exaltation.

The study of the various reports of cases of pernicious anemia associated with disturbances of the central nervous system indicates that the spinal cord is much more frequently involved than the brain. Edwards estimates 84 per cent. and that few cases of pernicious anemia fail to manifest some type of varying degree of spinal cord symptoms. When slight they may entirely escape attentions.

tion and when severe may so overshadow the true condition as to greatly confuse the diagnosis.

It is not necessary to remind you of the picture presented by ordinary pernicious anemia, but it would seem that, when this disease is associated with cord or brain symptoms, many of its chief physical manifestations are lacking and other characteristic blood changes, less pronounced, and even at times not true to the rule, appear. For instance, in neither of my cases was the reduction of hemoglobin marked, and at no time in their course were nucleated red cells to be found except in very limited numbers in one examination. Ehrlich has termed this the "aplastic" type, which is characterized by the reduced blood count and hemoglobin, and some distortion of the cells, but by an absence of cellular regeneration in the form of nucleated red cells. The recognition of this form of pernicious anemia may serve to clear the diagnosis in many obscure cases of tabes, or spastic paraplegia.

In considering mental symptoms, Cabot found "mental disturbances in 102 out of 647 cases of pernicious anemia: delirium in 44 cases: definite delusions in 14: hallucinations in 8: dementia in 9: true melancholia in 3 and mania in 3. One case remained in a public asylum for 29 years. In three markedly insane cases, the mental symptoms preceded the manifestations of anemia by several months. Presumably these mental symptoms are to be explained as a part of the general autointoxication rather than a result of the minute hemorrhages found in the brain post mortem."

The Journal of the American Medical Association for May 6, 1911, contained an article written by Dr. Arthur J. Patek of Milwaukee, entitled "Family Pernicious Anemia." Of all the monographs thus far published on the subject of pernicious anemia, this is by far the most engrossing because of the number of eases reported, and, too, it is the only reliable report in medical literature describing a familiar type of this disease.

The same article reported two cases of secondary anemia occurring in the same family, one of which subsequent to this report developed melancholia, which condition alone was responsible for her seeking medical advice.

I am indebted to Dr. Patek for the use of his notes on this case prior to the time of its coming under my supervision. Dr. Patek first saw the woman in August, 1908, when she was 36 years old. She was married, but never pregnant. At no

time was there any suspicion of specific disease. The mother died in her 80th year from general arterial degeneration. The father died at the age of 52 after suffering two years from pernicious anemia. A paternal uncle died from the same cause; also two of the patient's brothers, one after a year's illness in his 36th year and the other developed the aplastic type of the disease complicated by a spastic paraplegia and died when 46. A married sister succumbed to classical and uncomplicated pernicious anemia at 36 years of age. A paternal cousin also was reported to have died from the same disease.

When seen in August, 1908, this patient was suffering from melancholia, which had been developing for a period of several weeks. She was depressed, confused, and exhibited delusions of unworthiness. She presented an anemic appearance, but was well nourished. A blood examination at this time showed a red count of 3,700,000, no nucleated red cells, and but little poikilocytosis, hemoglobin 45 per cent. Her general appearance suggested the possibility of less favorable blood findings. Marked general improvement set in during one month's observation and she remained in perfect health, mentally and physically, until May, 1911. She then developed another attack, similar to the first but more profound in both mental and physical symptoms. From the statement of the husband, we would judge that the patient began to manifest signs of depression and confusion at least two months prior to her coming under observation again in May, when a distinct melancholia had de-The physical symptoms accompanying each recurrence were invariably overshadowed by the mental, and were never greatly in evidence until the mental picture was well developed. Besides being melancholy, patient was unresponsive, listles, slow to understand and answer commands.

The skin and mucous surfaces were slightly pale, conjunctivae yellowish, the knee reflex was greatly exaggerated, ankle clonus present, Romberg marked, ocular reflexes normal. Sensation was everywhere apparently normal, though her mental condition was such as to make this test of doubtful value. Her mental condition rapidly deteriorated and lucid intervals were few and brief. She developed an almost tonic spastic rigidity of arms and legs. One week later the general and mental condition were markedly improved: patient spoke rationally, but a melancholy tendency still persisted.

The blood examination at this time was as follows: erythrocytes 3,700,000, hemoglobin 60 per cent.; poikilocytosis and anisocytosis: no erythroblasts. It might be well to note that at this time Salvarsan 0.3 was administered four different times at intervals of two weeks without any appreciable results.

On May 28th the notes on the case state that the patient is feeling quite well, although she complains of rigidity of the muscles of the neck. Pallor of the conjunctivae and gums is more pronounced than during the previous week. Examination of the blood: reds 2,330,000, hemoglobin 50 per cent., and no nucleated reds. Improvement set in during the succeeding two months with apparent recovery from mental symptoms, but with partial retention of the spastic spinal symptoms.

In June, 1912, another attack of melancholia set in. At this time an examination of the blood exhibited 2,800,000 erythrocytes, hemoglobin 50 per cent., no nucleated cells. After three months duration the mental state was again quite normal. The gait become normal and inco-ordination slight, no ankle clonus, but markedly exaggerated knee reflexes and a slight slurring in speech. The blood picture gradually improved until it varied little from a normal appearance.

On October 15, the blood examination exhibited 4,480,000 reds, 4,600 whites, hemoglobin 75 per cent. There was no vestige of mental disturbance and all physical symptoms had disappeared except the intensified patellar reflexes, both of which remained greatly exaggerated.

Patient remained at home attending to all her duties until January, 1913, when she began to experience unusual exhaustion and shortness of breath and again came under my supervision on April 13th following. At this time both the skin and mucous membranes were quite yellow, there was marked prostration, edema of both eyelids and legs and she retained food poorly. There were no special spinal symptoms aside from greatly exaggerated reflexes. There was 75 per cent. hemoglobin, 4,480,000 reds, 5,000 whites and a very few nucleated reds. During this attack, she was free from mental symptoms, aside from a slight degree of depression and confusion. Improvement continued from the first and November 16, the blood condition varied little from the normal. was apparently well and returned to her home duties.

This last remission was very brief since early

in the year she again developed symptoms of profound exhaustion and a more rapid development of her former symptoms. When again coming under observation, April 15, 1914, her prostration was so great that she could scarcely sit up in bed. The heart action was rapid and feeble. The color characteristic, the retention of food almost impossible. The deep reflexes continued highly exaggerated. Mentally she was weak and confused. The symptoms all deepened with great rapidity and on the 20th of April, she died from exhaustion.

It is interesting to observe concerning the case just described that the patient had five acute exacerbations of her disease. In 1908, an attack accompanied by mild melancholia: a similar attack in 1911, in which the mental symptoms were much more profound. In 1912, the melancholia again appeared accompanied by marked ataxia and incoordination. The fourth attack began in January, 1913, and showed no special spinal or mental symptoms. The fifth attack began in March, 1914, developed rapidly nad closed the picture by death in less than a month.

Each succeeding remission was of shorter duration and each apparent recovery less satisfactory. The case well exemplifies a pernicious anemia masquerading under a type of melancholia with added cord symptoms suggesting both lateral and posterior column degeneration — predominatingly the former—and a blood picture that deviated greatly from the clinical.

Unfortunately, we were unable to secure an autopsy in this case. The findings would have proven most interesting, inasmuch as the case at times exhibited such distinct evidence of a lesion of the spinal cord, and at other times these same symptoms entirely disappeared. Consequently the question naturally arises as to what degree of organic change had actually taken place in the spinal cord

The next case to which I wish to call your attention is that of a widow, 46 years old, who was referred to me because of her nervous and mental condition. Both parents were dead and there was nothing of particular consequence in her inheritance. She was apparently of a neurotic type. Twenty years previously she had a double oophorectomy from which she made an uneventful recovery. Ten years ago she had a peculior spell upon returning home from shopping, suddenly losing strength in her legs and had great difficulty in

standing. These symptoms entirely disappeared and in twenty-four hours she felt as well as ever and no further recurrence was reported. This patient came to my attention early in January, 1911. She states that for one year previously she had experienced weakness in her legs. This suffered gradual progression, but was considered merely the result of general fatigue resulting from strain and worry accompanying the final prolonged sickness of her mother.

Examination showed a woman of average height, greatly reduced in strength and weight. There was nothing in the appearance of her skin or mucous membranes to arrest the attention. The vascular system and the bodily organs seemed in good condition. There was a distinct spastic paraplegia rendering her unable to walk or stand alone. Patellar reflexes were four plus and the other deep reflexes very active. There was a double Achilles reflex present. Sensory disturbances were absent. The reflexes of the eve and the eve grounds were normal and there was no disturbance of the cranial nerves. There was pronounced insomnia and the patient was highly nervous, irritable and emotional. The mental picture was one of great weakness and confusion and suggested a gradually increasing dementia. Her condition gradually grew worse in every respect until she was finally confined to her bed and developed incontinence of both urine and feces. At noon on January 25th, she had an epileptoid seizure, was unconscious for over an hour and was resuscitated with great difficulty. Following this attack there was no apparent increase in the paresis. In short no new symptoms grew out of this seizure aside from increased mental dullness. The following day it was observed for the first time that the skin and mucous membranes presented a slight lemon color. This suggested an examination of the blood which resulted in the following findings: 2,800,000 red cells, 20,000 white cells, hemoglobin 45 per cent., a few gigantolasts, a few microcytes, slight poikilocytosis, but no nucleated reds. In a few days marked dyspnea developed, the pulse became rapid and she showed an evening temperature of 100°. The face and hands became very yellow, delirium set in and, gradually failing, she died February 11, 1911.

This case presents a classical picture of the aplastic type of pernicions anemia described by Ehrlich. The mental symptoms were not pronounced, yet there was distinct evidence of deter-

ioration in the lateral and posterior columns of the spinal cord. Not until twenty days prior to her death did any of the ordinary symptoms of pernicious anemia present themselves. We feel that the delay of the correct diagnosis in this case alone would warrant us in presenting it in detail.

In summarizing the significance of the foregoing statements we feel justified in drawing the following conclusions: It would seem that pernicious anemia was the result of a toxemia or auto-toxemia acting on the tissues of the body in general, but showing a selective action for certain tissues, preferably the red blood cells and nervous tissue. 2. That certain types of pernicious anemia, where symptoms indicating involvment of the nerve centers are first to appear, may readily be confounded with tabes, paresis, myelitis, insular sclerosis and even hysteria, the diagnosis resting with the blood examination. 3. That in cases of pernicious anemia with marked involvment of nerve tissues, the blood findings are less characteristic and, too, these cases manifest a greater tendency toward remissions, making the prognosis more favorable.

- 1. Osler's Modern Medicine.
- 2. Modern Clinical Medicine.
- 3. Osler's Modern Medicine.

# THE NOSE AND THROAT IN THE ETIOL-OGY OF GENERAL DISEASES.\*

BY R. W. PORTEUS, M. D.

MAYO CLINIC, ROCHESTER, MINN.

The average physician has been slow to attach the proper degree of importance to the atrium of infection when dealing with local and general diseases. If only the place of origin of a disease in the body can be discovered and eradicated or properly dealt with, the first and most natural and often the most important step in the treatment can be accomplished.

Within the last five years the relative importance of the mouth, nose and throat in the origin of disease has been given a great deal more prominence than in the previous decade. Attention has been called to the fact that infections producing the greatest number of diseases enter the system via the alimentary and respiratory tracts: that in these tracts and in the excretory ducts of the body lie

the sources of the entrance of organisms which in many instances terminate life. The great importance of the well known diseases of the nasal passages and their sinuses, the lymphatic tissue of the pharynx, including the tonsils; and the diseases of the gums and teeth has been emphasized. Disease in these regions must be looked upon as a serious menace (Mayo<sup>1</sup>).

Let us consider the anatomical basis and the evidence as confirmed by experimental, clinical and therapeutic results for attaching such importance to these regions. The cavity of the nose, consisting of the two nasal fossae, is formed by fourteen bones characterized by their irregularity and their participation in cavity formations. Five of them contain one or more pockets or sinuses; the sphenoid alone enters into the formation of five cavities and four fossae. Opening into these various cavities are numerous orifices from other parts of the head. Thus, in either nasal fossa the three meati formed by the turbinates contain seven orifices, all transmitting vessels or nerves or leading into sinuses of the greatest importance. This entire region is richly supplied with blood; has a small amount of musculature and very little lymphoid tissue.

The pharynx may be described as a conical, musculo-membranous bag suspended base up from the basilar process of the occipital bone and extending to the lower border of the larynx where it becomes continuous with the esophagus. It differs from the nares in possessing more muscular and lymphoid tissue. The presence of this lymphoid tissue has long been noticed and discussed, but its importance has been more particularly emphasized within the last few years.

The most attention has been directed to the part constituting the faucial tonsils. There is a smaller amount of lymphoid tissue in the naso-pharynx which, if hypertrophied, is known as an adenoid. A still smaller amount of lymphoid tissue is at the base of the tongue in the glosso-epiglottic space and is called the lingual tonsil. These four structures are sometimes known as Waldeyer's tonsillar ring. As all are of similar microscopic appearance, a description of the larger may be given and by modification applied to each of the others.

Briefly, the faucial tonsil is a lymphoid structure lying between the anterior and posterior pillars of the fauces, consisting of the palato-pharyngeus and the palato-glossus muscles, respectively, and with the plica tonsillaris above and the plica

<sup>\*</sup>Read before the Fond du Lac County Medical Society, Fond du Lac, Wis., May 12, 1915.

triangularis below. The inner or median surface is covered by squamous epithelium, while the outer and lateral surfaces are covered by a fibrous capsule of connective tissue. Microscopically, we find finger-like trabeculae of connective tissue extending into the lymphoid substance which serve as supporting structures and carry the blood vessels and lymphatics. From the median surfaces extend the crypts formed by invaginations of the epithelium and reaching almost to the capsule. The lymphoid cells of the tonsil are massed together in a loose connective tissue reticulum and through this are seen the follicles consisting of germinating lymph cells and their newly formed lymphocytes. These lymphocytes pass out of the follicles; some of them work through the epithelium into the crypts, while most of them move through lymph spaces along the trabeculae and finally enter into the efferent lymphatic vessels. In the crypts are found cast off epithelium, lymphocytes in divers stages of disintegration, leukocytes, various bacteria and detritus. When the tonsils are compressed by swallowing, some of the contents is forced out of the crypts and some forced still deeper into them. Here the epithelium consists of only one or two layers of cells and bacteria can easily gain entrance into the lymphoid tissue. Thus the contents of the crypts, plus heat and moisture, form an ideal incubator for the agents of infection, and from this location invasion is comparatively easy through the lymphatics.

.The lymphatics of the tonsil are numerous and arranged as follows: The efferent vessels empty into two main groups: (a) The lymphatic glands near the angle of the lower jaw; then into the superficial cervical chain which drains directly into the inferior deep cervicals: (b) the superior deep cervicals. These glands are twenty to thirty in number and are located along the internal jugular and subclavian veins. They are divided into a superior and an inferior group; both groups are situated along the internal jugular vein between the base of the skull and the subclavian veius, and ultimately receive the efferent vessels from all the lymphatic structures of the head and neck. The efferent vessels from the inferior group finally unite to form the jugular lymphatic trunk which empties on the right side into the right subclavian vein through the right lymphatic duot, and on the left side into the thoracic duct (Deaver<sup>2</sup>).

Thus the nose and throat form a region studded with cavities and sinuses and containing an abundance of lymphoid tissue; two conditions most favorable for inflammatory processes. Exposed to the inspired and expired air, to contact with food, drink and other substances taken into the mouth, and with very close and important relations to the general circulatory and lymphatic systems, the ease and frequency with which the nose and throat become involved in various local and systemic disorders can readily be understood. I will not discuss the ordinary local inflammations, degenerations or tumors of this region, except as they are concerned in the general or systemic diseases, but rather some of the bacteriologic and experimental evidence which has accumulated to establish more firmly the assertion that the lymphoid tissue of Waldeyer's ring is the most frequent portal of systemic infection.

Wood<sup>3</sup> demonstrated the presence of bacteria in the tonsil of a hog and says: "The anthrax bacillus penetrates through the living unaltered cryptal but not the surface epithelium. Having gained an entrance, it tends to multiply in the deeper layers and thus passes into the interfollicular tissue. Rapidity of invasion is governed both by the virulence of the bacteria and the susceptibility of the animal. In some sections examined the bacilli were found penetrating the blood vessel walls, and in a few were seen in the blood current."

MacLachlan4 has reported the microscopic examination of 350 pairs of tonsils, and makes the following statement: "We have observed that when symptoms of acute tonsillitis are present there is always a pathologic basis as shown by ulceration of the lining of the crypts. We therefore feel that a similar lesion is present in the tonsillitis preceding rheumatism and, as far as we know, this lesion differs in no way from that of acute lacunar tonsillitis. We regard the ulceration of the lining of the crypts as being the vulnerable point of entry of organisms from the mouth. It matters little apparently what bacteria have produced the lesion, for, once the ulcer has formed, it is possible for any type of organism to gain access to the deeper tissues."

Dick and Burmeister<sup>5</sup> made investigations regarding the toxicity of human tonsils. These were received in sterile gauze, ground in a mortar and extracts prepared, plated and examined microscop-

ically. These extracts were injected into rabbits, guinea-pigs and dogs. Many interesting observations were made regarding the effect on the injected animals and their condition ante-mortem and post-mortem. Their conclusions are:

- 1. "The extracts of tonsils are acutely toxic for animals;
- 2. These substances affect animals in a manner similar to that of anaphylactoxin;
- 3. The relation of the toxicity of tonsil extracts to the bacterial flora demands further study. The results of this work, however, would indicate that, as a rule, extracts of those tonsils are most toxic which are associated with hemolytic streptococci."

Davis<sup>6</sup> reports a study of the tonsils in their relation to chronic articular, renal and cardiac lesions in 113 cases and his data may be summarized briefly as follows:

Arthritis. Hemolytic streptococci were found in all of the 28 cases examined and were predominant in 25 cases. Arthritis was promptly produced by the injection of the bacteria into the veins of rabbits.

Nephritis. 10 cases studied; 9 showed hemolytic streptococci. On injection into the veins of rabbits, all ten developed lesions of the tendon sheaths or joints; the kidneys and urine remained negative.

Endocarditis. 10 cases studied; cultures from 4 of the 6 showing hemolytic streptococci were injected into rabbits, and arthritis promptly developed. Of the remaining cases, 2 gave pure pneumococci and 2 pneumocci mixed with other bacteria. Rabbits were injected with three of the pneumococci strains; 2 developed marked vegetative endocarditis.

Of the remaining cases, nearly all with histories of repeated attacks of tonsillitis, 61 were classified as tonsillar hypertrophy. In 50 the bacteriology showed hemolytic streptococci in almost pure cultures; pneumococci predominated in 2; influenza bacilli in 3. Seven strains of the streptococci were injected into rabbits, all developing arthritis. One case of multiple neuritis without arthritis or heart lesions, and in which the crypts revealed pure hemolytic streptococci, produced a rapidly fatal multiple arthritis in a rabbit. The microscopic examination of the tonsils in this group generally showed polynuclear leukocytic clusters far down

at the end of the branching crypts. With history of repeated attacks of tonsillitis the crypts were found more and more distorted and the bases more fibrous. Adhesions closing some of the crypts were observed with resulting abscess cavities beyond.

Rosenow's achievement in isolating the streptococcus rheumaticus and his brilliant work in the transmutation of bacteria entitles him to the foremost place in showing the direct connection between focal and systemic disease. He discovered a certain micro-organism as the causative agent of a definite pathologic lesion. This was proved by cultural isolations and animal inoculations. Then by means of variations in culture media, oxygen tension, salt concentration, growing in symbiosis, injections into cavities of animals, etc., he succeeded in changing the morphologic and various other properties of many bacteria. Thus strains of hemolytic streptococci have been converted into streptococci viridans, typical pneumococci and streptococci mucosa. Similarly, strains isolated as pneumococci from the sputum, blood and lungs in pneumonia, and from empyema, have been made to correspond to hemolytic streptococci; others changed into streptococci viridans, streptococci of rheumatism, etc., and some back again into pneumococci.

This evidence strongly suggests that similar changes may occur in the bacteria located in various foci of infection in the human body. Focal infections are no longer to be looked upon as places of entrance of bacteria but as places where conditions are favorable for them to develop and acquire properties which give them a wide range of affinity for various structures.

In reviewing these data, an interesting chain of evidence may be formed. There are the microscopic and the bacteriologic examinations of diseased tonsils; the demonstration of bacteria invading the tonsil and entering the blood stream; the finding of toxic substances in the tonsil; and the isolation of organisms from the tonsils of patients having cardiac and arthritic diseases which subsequently have been shown by animal inoculations to be the etiologic factor of the disease. Nothing seems lacking to prove the conclusion that bacteria may gain entrance to the tonsillar tissue, localize there and then by dissemination of their toxins, or the organisms themselves, produce pathologic lesions in remote parts of the body.

That the tonsils are often factors in many sys-

temic disorders where a direct bacterial connection may not be demonstrated is highly probable. They may become such by acting as contributory agents in creating a favorable condition for the development of systemic disease. Their connection as a factor in this respect is shown by the marked therapeutic results which so constantly follow their removal in given conditions. That this relationship has been noticed for a long time is established by records that Celsus removed tonsils in the year 10 A. D.

This evidence as to the cause of systemic disease can be most easily considered by noting the conditions in which the removal of tonsils has been followed by marked benefit to the patient:

- 1. Chronic Hypertrophic Tonsillitis: when narrowing the throat and interfering with proper respiration, phonation, deglutition or involving the sense of hearing.
- 2. Recurring Follicular Tonsillitis. This is often the cause of pain and tenderness in the neck in the region of the tonsils. More important, however, is its connection with various systemic conditions.
- 3. Peritonsillar Abscess (quinsy), formerly dreaded because it occasionally ruptured during sleep and drowned the patient. More recently, cases have been reported where the patient, declining operation, had the abscess open into the veins of the neck with rapid and fatal septicemia.
- 4. Involvement of the eustachian tube, middle ear or mastoid region. This may result from the direct spread of chronic inflammation or from pressure on the orifice of the tube.
- 5. Chronic Pharyngitis, Laryngitis and Bronchitis: all are occasionally produced and are always aggravated by the infected discharges from the tonsillar crypts.
- 6. Various types of Neuralgia and Neuritis. Todds has emphasized the diseased tonsil as a frequent cause of neuralgias in the region of the tonsil, ear, side of head, nose, teeth, gums and antrum of Highmore. The lymphatic glands along the superior laryngeal, recurrent laryngeal and glosso-pharyngeal nerves become enlarged and swollen; by pressure on these nerves or by involving them in the inflammatory reaction, there is a resultant neuralgia or neuritis; disturbed functions such as hoarseness, loss of voice, cough, difficult deglutition; defects in hearing, dyspepsia, or disturbed heart action. He remarks that "such ton-

sils may not be, and usually are not, large or acutely inflamed."

- 7. Cervical Adenitis. Wood, after some original work on tuberculous absorption through tonsillar tissue, reviewed the literature and summarized the findings of autopsies on individuals dying of tuberculosis. In 145 autopsies, 103 or 71 per cent. showed secondary tuberculous changes in the tonsil. In 1671 autopsies, there was primary tuberculosis of the faucial tonsil in 88, or more than 5 per cent., and of these the pharyngeal tonsil was infected in 10 per cent. Various pathologists studied tonsils removed from patients having adenitis and all agree that diseased lymphoid tissue is the channel of tuberculous infection of the cervical lymph glands.
- 8. Endocarditis, myocarditis, pericarditis, arthritis, nephritis, chorea, osteomyelitis, pleurisy, phlebitis, meningitis and various eruptions of the skin may be mentioned. The relationship between tonsillitis and rheumatism. commented on long ago, is now firmly established. Recently many writers have reported cases of relapsing iritis, phlyctenular and interstitial keratitis, etc., which have long resisted the usual lines of treatment but quickly vanished after the removal of diseased tonsils. Some of the conditions may seem rather improbable but, for illustration, let us consider chorea.

Archibald10 has made the following observations: (1) The frequency of a previous history of tonsillar disease in rheumatism and chorea; (2) the frequent occurrence of the two diseases together or at different times in the same individual; (3) the liability of the two diseases to be complicated by cardiac affections. He refers to Rosenow's work in rheumatic infection which proved conclusively that definite strains of the same bacteria have a predilection for special tissues and organs. Following this idea, he says: "It would seem probable that chorea also is produced by a strain of streptococeus which has a special tendency to attack the central nervous system." Supporting this theory, he refers to the work of Dick and Rothstein<sup>11</sup>. These investigators isolated a streptococcus from the throat of a patient with chorea of five years duration. Similar organisms were isolated from a number of patients with more acute chorea. A dog injected intravenously with a growth of this streptococcus developed choreic movements within twelve hours. Archibald gives

a detailed report of 7 patients with chorea who had tonsillectomies performed within the last three years. Briefly summarized, he found:

- 1. That the 7 patients gave a history either of tonsillitis or inflammatory rheumatism, or both:
- 2. All presented choreiform movements at the time of operation;
- 3. The severity of the symptoms was marked in 5 patients; 6 had very large diseased tonsils; 1 had medium size tonsils with crypts;
- 4. Cardiae complications: 4 had mitral regurgitation; 3 had no cardiac lesion.

When the tonsils were removed from these patients, not only did the general health improve, but the choreic movements ceased in a remarkably short time. In a very few weeks they were in a different condition both mentally and physically.

The recognition of an infected tonsil is often a matter of some difficulty. In making the diagnosis, the mueosa of the surface of the tonsil and of the pharynx should be earefully inspected. The presence of redness and of a granular surface with the openings of the crypts containing pus or caseous material will often be noted. The anterior pillar may be retracted and pressure applied to the base of the tonsil. If the tonsil is diseased, there will be more or less pain and the patient will flinch from the tenderness of these diseased areas. Caseous materials or droplets of pus frequently exude from the crypts. Such tonsils may or may not be enlarged; if enlarged, they are the more easily recognized. They may vary from a hazelnut to a walnut in size and may project into the throat but more often are deep in the tonsillar fossae.

Shambaugh<sup>12</sup> has emphasized two points in the recognition of such tonsils:

- 1. The History of the Case. It is usually found that the systemic infection develops simultaneously with or immediately following an acute tonsillitis. In other eases latent foci may be retained in the depths of the tonsil; these may become active at later periods, so it is important to look for a history of tonsillitis, quinsy, sore throat, etc.
- 2. The Examination of the Tonsil. He espeically ealls attention to the large flat tonsil with a granular surface. The appearance is due to hypertrophy of the connective tissue with partial obliteration of the parenchyma. In conclusion, he states that (a) "Chronic infection in tonsils can

often be detected in cases in which there has been no history of acute tonsillitis; (b) chronic infection in the tonsil may be present with no evidence either from the history or examination; (c) such tonsils should be removed when no other foci of a severe systemic infection can be detected."

There may be various other foei of infection responsible for systemic disease though probably the tonsil is the most frequent and the most important. The dentist, the nose and throat specialist, the gynecologist, the gastro-enterologist, etc., may diselose other sources of infection in the examination of difficult or obscure cases. These findings should be correlated for use in treatment by the family physician or internist.

In eited cases, tonsil operations have failed to afford the expected improvement. There may be various reasons to account for such failure. Granted that the tonsils were the only foci of infeetion, all others having been eliminated, and no bodily structures irreparably damaged, by far the most common eause of failure is the incomplete removal of the tonsil. Remnants are left behind only to be covered by the scar tissue which forms and more or less closes and seals the remaining crypts. The remnant is thus converted into a most dangerous focus of systemic infection. That such instances are not uncommon is shown by the work of Cocks<sup>13</sup> in New York in which he was assisted by Maxwell of the Department of Education and Baker of the Department of Health in cheeking up the results of tonsil operations on public school children. The following are among Cocks' summarized statistics:

- a. Of 89 operated on, 9 or approximately 10 per cent. received mutilations of the soft parts adjoining the tonsils;
- b. Of 21 operated on without general anesthesia, 19 or more than 90 per cent. were badly done;
- c. Of 52 operated on with general anesthesia,12 or 25 per cent. were poorly done;
- d. If to this number of eases receiving mutilation are added the number badly operated on, both with and without general anesthesia, there will be 26.9 per cent. badly done. In addition, there were 31 children who required further treatment for nasal conditions.

In a minor degree much that has been said regarding the faucial tonsil may be applied to the pharyngeal tonsil, or adenoid. The arrangement

of this lymphoid structure resembles that of the faucial tonsil, the principal difference being that of size. Also, the capsule is absent and the crypts are not so numerous nor so conspicuous. Exposed to the same sources of infection that the tonsils are, except to a less degree, this structure often causes less disturbance because its location permits an unrestricted inflammatory expansion and furnishes better drainage of its exerctions. All are familiar with the large adenoid in children, its effect upon children, and the truly wonderful improvement in general physical and mental condition following its removal.

I wish to emphasize the frequency with which large adenoids exist in the adult. Anyone may confirm this by the employment of the post-nasal mirror as a routine in the examination of patients. Even with no history of mechanical obstruction to respiration, no perceptible interference with deglutition or the sense of hearing, it has frequently been my experience to find large adenoids in the naso-pharnyx of the adult. Occasionally their surface presents large open crypts from which exudes mucus or a muco-purulent discharge. The significance of this is obvious and the removal of such adenoids gives the patient marked benefit.

Diseases of the nose may be considered from a similar standpoint. Passing over the much-discussed deflected septum, including its symptomatology and corrective measures, the various types of rhinitis and diseases of the accessory nasal sinuses, all frequently having a direct connection with systemic disorders, a work not so widely known, but striking in clinical results, will be briefly reviewed:

Matthews14 has called attention to the pathologic conditions in the nose, in the accessory nasal sinuses and the naso-pharynx which are so frequently found in patients having true bronchial astlima. In 184 cases reported, 58 had polypi in one or both nostrils and 63 had suppuration of one or both antra. Therapeutically he found almost invariably relief of the asthmatic symptoms to be in direct proportion to the extent of improvement in the pathologic conditions of the nose, sinuses and naso-pharynx. He reviews the experiments in anaphylaxis by Theobald Smith and others and shows the similarity of this condition to that found during a paroxysm of bronchial asthma. An attack of hay fever and the asthma that accompanies it have been produced by the injection of a minute quantity of the toxalbumin of the pollen into the individual subject to such affections. No reaction occurs in normal individuals. The practical application of these observations is stated as follows:

"It has been found that a foreign proteid capable

of sensitizing the individual, and later of producing the anaphylactic shock, may result from autolysis of retained placenta or other tissues. frequency with which retained and altered mucoid and purulent discharges are found in the nostrils or nasal sinuses suggests that here is the site of the production and entrance into the blood of the foreign proteid which produces the anaphylactic reaction in these cases. The quantity of foreign proteid necessary to sensitize and later to produce the anaphylactic reaction in a susceptible individual is so small that the known absorptive powers of the nasal mucous membrane could undoubtedly pass it into the blood under suitable conditions. Moreover, the reaction has been produced experimentally in guinea-pigs by the inhalation of animal emanations followed by the injection of serum from animals of the same species. The results of treatment of nasal conditions in asthmatic patients present still other analogies to anaphylaxis. Operation to establish free drainage and acration of the mucous membranes of the nosc and accessory sinuses prevents retention of secretions, while in other cases the same may be accomplished by local treatment to stimulate profuse discharge so that secretions are washed away before autolysis occurs. This prevents the formation and intermittent absorption of the specific foreign proteid which causes the anaphylactic reaction commonly known clinically as asthma."

This theory is being applied practically in our work at the Mayo Clinic with results that are uniformly good and often remarkable.

Bearing in mind the many systemic disorders in which pathologic conditions of the nose and throat are causative or contributory factors, routine physical examinations should always include a thorough inspection of this region. In this way the real nature of many obscure systemic conditions will be revealed with great clearness; and treatment as indicated by such examinations will be followed by the most satisfactory results.

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# CYSTOSCOPY IN SURGICAL DISEASES OF THE BLADDER AND KIDNEY.\*

BY E. A. FLETCHER, M. D.,

### MILWAUKEE.

Acute retention, acute unilateral haematogenous kidney infection, calculous anuria demand immediate operative interference and permit of no delay, but delay in the surgical treatment of all other pathological conditions in the upper urinary tract until an accurate diagnosis and a satisfactory prognosis are made is amply justified by the results

obtained when modern diagnostic methods have been employed.

Seeing a patient for the first time today with stone in the kidney or with prostatic hypertrophy and operating on him tomorrow is not modern surgery, and the development of cystoscopy is in a very great measure responsible for the truth of this statement. The urinary apparatus is essentially a tubular one, the calibration of which has been arranged with the greatest delicacy, and any interference with its outflow disturbs the physiological equilibrium of the whole apparatus, resulting sooner or later in chronic kidney or bladder retention. The chief functions of the kidney are filtration and concentration. The molecular concentration of the blood in the normal individual is maintained at a constant point and this to a very great extent by the kidneys. Substances come to the kidney in the blood in dilute solution and are picked out by the kidney and eliminated in concentrated solution. Water and salt come through the glomeruli in alkaline solution, salts organic and inorganic are excreted by the tubules, making the urine acid and a certain amount of water and salts are absorbed by the tubules. It is not known that the kidney has any internal secretion, but the fact that anuria without uremic symptoms may exist for two or three weeks has suggested the possibility.

The urine leaves the kidney pelvis with a certain amount of force, the kidney pelvis empties itself completely with each contraction; the urine is propelled into the bladder, and when this viscus has attained a certain degree of fulness, it is expelled as from the kidney and has a projectile force as it leaves the urethral meatus. Chronic incomplete bladder retention is a common condition and not infrequently overlooked.

Prostatic hypertrophy, contracture of the vesical neck, tabes, tumor, diverticula and rarely tubercular ulceration are the causes of partial or complete bladder retention of interest in cystoscopy.

In two-thirds of all cases of prostatic hypertrophy, there is an enlargement of the gland which can easily be felt per rectum, but in a certain per cent. of cases, when the median lobe is the only part involved, no abnormality can be detected by rectal palpation but a cystoscopic examination discloses an intravesical projection. In all cases of prostatic hypertrophy a cystoscopic examination is

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of a distinct advantage. It discloses any abnormalities in the bladder such as stone, tumor or diverticulum, and enables one to determine which type of operation, the suprapubic or perineal, is indicated, and there are distinct indications for each.

Contracture of the vesical neck, stricture of the neck of the bladder, prostatism without hypertrophy, median bar, obstructive prostatitis, are some of the current terms applied to a condition which is not infrequent and which was first described by Mercier as Valvule du Col. Keyes, Jr., says he knows of no common malady of the genitourinary organs more elusive than stricture of the neck of the bladder. Its etiology is unknown and its pathology is probably variable. Marion believes that it is generally due to the development of a small sub-mucous adenoma which causes a spasm of the internal sphincter but it is generally regarded as being due to the formation of fibrous tissue in the internal sphincter. The internal sphincter is contracted so tightly that it admits only with difficulty the finger tip. Contracture of the vesical neck occurs about one-third as frequently as prostatic hypertrophy and is the most common cause of congenital hydronephrosis. It may be congenital or it may develop at any age. It is sometimes seen in connection with stone in the bladder and it rarely follows a suprapubic prostatectomy. Most commonly it is thought to be associated with a posterior gonorrheal infection. The patient with contracture of the vesical neck has many of the symptoms of a stricture with a residual urine varying from a few c. c.'s up to complete retention. Without a cystoscopic examination, a correct diagnosis is impossible. With the aid of the cystoscope, frequently a median bar can be seen and all other causes of chronic retention can be excluded. In the case of a tumor acting as a ball valve and causing retention, the diagnosis is easily made with the aid of the cystoscope.

In tabes, vesical symptoms may occur very early; not rarely they will be the first symptoms to cause the patient to seek medical aid. At the present time I have three patients of whom this is true. Nitze was the first to point out the fact that these tabetic bladders can be diagnosed cystoscopically. The internal orifice is relaxed, one can frequently see the veru, the trigone is atrophied, the interureteric ligament does not stand out prominently

as normally, and there is more or less trabeculation of the bladder wall.

Diverticula as a cause of chronic urinary retention are generally congenital and not associated with trabeculation. They are generally located at one side of the trigone. In size their capacity may vary from a few c. c. to several hundred. So long as the diverticulum is uninfected it may cause nothing more than a sensation of fulness and incomplete bladder evacuation, but eventually if the diverticulum is at all large it becomes infected, often contains one or more stones, and gives rise to very marked and distressing symptoms. Not infrequently a ureter mouth is pulled into a diverticulum. If left undisturbed, these infected diverticula eventually lead to a kidney infection.

Trabeculation of the bladder wall presents the most striking of all cystoscopic pictures. It is commonly associated with the formation of cellules and generally indicates obstruction. The presence of cellules or diverticula in a bladder is a contraindication to the crushing operation for stones, for the fragments would lodge in the diverticulum and form nuclei for new stones. The presence of diverticula is easily diagnosed by the cystoscope and their size may be determined by filling the sack with collargol and then radiographing the patient.

Tuberculosis of the bladder very generally causes frequency of urination, but rarely, when the ulceration is at the internal orifice and extends deeply, it has been the cause of complete retention. In tuberculosis of the bladder, which is never primary, but always secondary, and almost always secondary to kidney tuberculosis, the eystoscope is invaluable, and here too evstoscopy may find its greatest difficulties, owing to the greatly decreased bladder capacity and the very great vesical irritability which the disease has produced, and the destruction by ulceration of the normal landmarks. Cystoscopy is generally a painless procedure and likewise so is ureteral catheterization, but cystoseoping a bladder having only a capacity of 50 e. c. is not painless, and in these greatly contracted tubercular bladders a general anesthetic is at times necessary. Urologists seldom see tubercular bladders in the stage of tubercle formation. Most generally these patients come some time later when their tubercles have broken down and are in a stage of nleeration, small isolated superficial irregular ulcers surrounded by a red areola. These ulcers

most often are located on or near the trigone, most often about the ureter mouth of the kidney affected, but this is not invariably so. The area about the side opposite may be the ulcerated area, though the kidney on that side may be non-tubercular, and this fact makes the use of segregators entirely unreliable in genito-urinary tuberculosis.

The simple cystoscope is of use in diagnosing the presence of one or more stones in the bladder, their size and condition, free or encysted. One of the serious criticisms of litholopaxy has been that after crushing recurrences are much more common than after lithotomy, because of the fact that the "last fragment" has not been removed, so after litholopaxy simple cystoscopy is indicated to see that this "last fragment" has been or is removed. The presence of foreign bodies other than stones, fragments of catheters, filiform guides, etc., is easily detected by the cystoscope.

Secondary cystitis is a very common condition, but primary idiopathic cystitis is a very rare condition, notwithstanding the fact that it and urethral stricture are the two most common diagnoses made of chronic genito-urinary conditions when neither one exists. If a cystitis exists, it can easily be seen cystoscopically, the inflammation is generally most marked in the lower third of the bladder where most bladder pathology is found, the internal orifice and the trigone are especially involved, the mucous membrane is reddish, instead of as normally straw color, the blood vessels are unduly prominent, and the epithelium has lost its luster.

It occasionally happens in pyonephrosis that a simple cystoscopy will disclose pus pouring from the ureter mouth or in renal hemorrhage one can sometimes see the blood coming from the affected side, but we do not rely on the simple cystoscope here, catheterization of the ureters must be resorted to. If the ureter mouth is located in the diverticulum or if it is abnormally placed or if we suspect no urine is escaping from it, because of the inability to pass a ureter catheter, the intramuscular injection of indigo carmine and simple cystoscopy will solve the problem as one can see the deep blue stream when it is projected into the bladder, provided of course that the kidney is functionating. In a simple cystoscopic examination in the presence of kidney disease the presence of an abnormal ureter mouth or of an abnormal area about it or of an abnormality in the ureteral

swirl is presumptive evidence only of a kidney lesion on that side.

Operative cystoscopy finds its chief and most important use in the endovesical removal of bladder tumors. Nitze devised an operating cystoscope with a cautery attachment which he himself used with very remarkable results, removing 150 tumors with but one death and only a few recurrences, and Casper has operated on 250 cases with no mortality, but in the hands of most men, Nitze's operating cystoscope is a dangerous instrument and has been replaced by much simpler ones. Cystoscopically it is not always possible to distinguish between benign and malignant tumors of the bladder; in a general way, it is said that the pedunculated growths are benign and the sessile ones are malignant. Infiltration about the base of a tumor indicates malignancy. Papillomata when pedunculated appear as fine villous growths or sometimes they are wartlike and sessile.

The operation of suprapubic cystotomy and removal of bladder papillomata carries with it an immediate mortality rate of 5% and has gained a very bad reputation because these growths so often recurred as papillomata or as carcinoma, so that when Beer of New York five years ago reported the successful endovesical treatment of several papillomata by means of the high frequency current, it was enthusiastically taken up all over the world and has today supplanted the open operation and the results seem to be superior to those obtained when the older method of treatment was used, moreover there is no operative mortality. For carcinoma, however, the high frequency current alone, except in a very few cases, has not produced any cures, but it has been extensively used on inoperable cases. It checks hemorrhage at once. A small papilloma as large as a split pea can be removed with a high frequency current in one or two treatments. So long as the spark is applied to the tumor only, the treatment is not painful, and the patient can generally be treated as an ambulatory one. In the treatment of carcinoma of the bladder, radium is being used at the present time in a specially devised cystoscope, which holds the radium capsule in contact with the tumor. A few temporary cures have been reported, but it is too early to speak of permanent results.

Catheterizing cystoscopy. Catheterizing cystoscopy is very much more important and frequently used than is operative cystoscopy, and requires

much less experience to acquire a moderate amount of skill than does simple cystoscopy. In localized bladder inflammations and ulcerations, concentrated solutions can be directly applied to the bladder wall through the ureteral catheter. When a diverticulum of any depth exists, the bismuth catheter can be coiled up in it and the diverticulum shown with the X-ray. In catheterizing the ureters, obstructions in the nature of stones, strictures, kinks, etc., may be met with. A ureter catheter may, however, pass a stone in the ureter, and many times the tip of the catheter will become caught in a fold of the mucous membrane in a perfectly normal ureter and more or less manipulation is required in order to advance the tip of the catheter into the kidney pelvis, so that because the ureter catheter does not freely ascend to the kidney pelvis, it is not evidence that urine cannot freely escape through the ureter. In the case of stone in the ureter or in the kidney pelvis, Kelly's waxed tip is thought by many to be the most positive method of diagnosing stone. In small ureter stones the passage of the ureter catheter is not rarely followed by the spontaneous expulsion of the stone. As the course of the ureter is variable, a bismuth catheter in it in X-ray diagnosis is often of great value in deciding the question as to whether or not the stone is in the ureter. Sometimes in anuria the passage of a ureteral catheter into the kidney pelvis will start a free flow of urine. The most valuable and most frequent use of the catheterizing cystoscope is to obtain urine from each kidney separately, and for the purpose of making functional renal tests.

In the case of pyuria and in hematuria, it is very often impossible to tell from any signs or symptoms the origin of the pus or blood. Frequently one is entirely unable to say from the appearance of the urine in the three glasses whether or not the pus or blood is renal or extrarenal in origin, but granting that it does come from the kidneys, ureteral catheterization is necessary in order to know from which one or if from both as the case may be. The enlarged kidney or the tender kidney may be the well one. Having determined which kidney is pathological, but partly solves the problem in cystoscopy. The nature of the lesion must be discovered and the functional capacity of each kidney known before any operative interference is permissible, as it is only in this way that we may with certainty avoid operative deaths from uremia. Before ureteral catheterization and functional renal tests were popularized deaths from uremia following kidney operations were common. In fact, uremia was the most common immediate cause of death in renal surgery, but today there is no excuse for such a death whenever ureteral catheterization and functional tests can be used. Casper has done 100 nephrectomies without a kidney death; Wildbolz has done 250 with three kidney deaths, but in these three fatal cases, he was unable to employ the cystoscope.

Since the dawn of renal surgery an effort has been made to learn something of the condition of the second kidney prior to operation on the first one. Simon suggested that a hand be pushed up into the colon through the rectum and the kidney be felt. Up to 1900 such men as Rovsing, Morris and Küster suggested that a bilateral lumbar renal exposure be done in order that the second kidney might be inspected and palpated, but this unnecessarily mutilating operation gives absolutely unreliable results and may add materially to the mortality. Tuberculosis of the kidney begins in the medulla, not in the cortex, and early in the disease nothing is learned from palpation or inspection, and the same is true of some other renal diseases.

We know that the work of both kidneys can be performed in a perfectly satisfactory manner by somewhat less than one kidney when that kidney is a normal one or rather has a normal functional capacity. It is more important to know if the second kidney is functionally competent than to know if it is diseased. Shortly after the introduction of the catheterizing cystoscope, various functional kidney tests were introduced, and at the present time these tests are extensively employed in prostatic and renal surgery throughout the world. Young is guided by them entirely as to when to operate in prostatic hypertrophy. He has done 700 prostatectomies with a mortality of 4% and every kidney case of his has one or more functional tests made prior to operation. While functional kidney tests are not all of equal value, they all are of decided value, and the more familiar a man is with any one test, the more valuable that test becomes to him. It is a perfectly simple matter to make use of two tests simultaneously and most men do so rather than to rely entirely upon any one test. In the United States, the phenolsulphone-phthalein test is the most popular at the

present time, and deservedly so. While using it, the Albarran experimental polyuria test can be combined with it and a urea test can be made comparing the output of one kidney with that of the other. The interpretation of functional tests must be correlated with the clinical findings, e. g., a low functional test in obstruction of the lower urinary tract does not mean at all the grave condition that it would in a primary lesion of the kidney, and a functional test which indicates a stable condition of the kidneys offers a much more favorable prognosis than one which indicates a failing function.

A diseased kidney is generally working at its maximum capacity and cannot carry any overload, while the normal kidney can carry on twice the amount of work it is usually called upon to do without any difficulty. In surgical diseases of the kidney, it is desirable to know prior to operation what the functional capacity of each kidney is, while in prostatic hypertrophy we simply seek the combined functional capacity of the kidneys. Normal kidneys do about the same amount of work in a given time—one hour—during shorter periods of time they may vary somewhat in the amount of work done. The functional integrity and anatomical integrity of a kidney generally parallel each other.

Functional tests. Urea. The total amount of urca in the urine has long been used as a test of combined renal function, but it is now recognized and almost universally so that a urea determination, even when the intake and output of nitrogen is controlled, has very slight value, for a so-called normal urea output does not exist (Blum). Periods of nitrogen retention lasting several days occur in perfectly normal individuals and are followed by periods of excessive nitrogen excretion, and this occurs in disease also. The urea output of one kidney compared with the output of its fellow is however a decidedly valuable functional test. A kidney which excretes one-quarter as much urea as its fellow is not a normal kidney and a kidney which excretes four times as much as its fellow should not be removed. (Barringer.)

Polyuria test. Albarran—1900-1905.

The patient has nothing to eat or drink for four hours prior to the test, the ureters are catheterized and the urine is collected for one-half hour from each kidney, and then three glasses of water are given and the urine collected for half-hour periods. During the second and third half-hour periods, the

amount collected from each kidney is considerably increased and falls again during the fourth half-hour. While there is a decrease in the relative amount of the solid constituents of the urine during this test, the total amount of solids excreted may be increased.

Phenolsulphone-phthalein. Geraghty and Rowntree. 1910.

.006 injected intramuscularly. Color appears in the urine from 5 to 10 min. 40 to 60% of the dye excreted in the first hour. 20-25% in the second hour; in intravenous injections, which are almost entirely used at the present time, the color appears in three to five minutes. 35-45% eliminated in the first quarter hour, 15-20% in the second quarter, and 15-20% in the next half hour. The dye is excreted chiefly by the tubules. normal patients, time of appearance of the dye in each kidney urine and the amount excreted by each kidney is the same. The time of appearance of the dye in the urine is of much less importance than the amount of dye excreted. The test has three advantages. The dye is almost entirely excreted by the kidneys, and in a brief period of time (1 hour), it is easily read colorimetrically and in parenchymatous nephritis a decreased output is given, which is not true of the indigo earmine or phloridzin test. The results of its use show that it is the most reliable single functional test that we have. While using it, we can at the same time employ the urea and experimental polyuria tests without any additional burden to the patient, and experience shows that the combined use of two tests is an additional safeguard. A very practical question is, What is the limit of safety in operating when using these tests? Of course, when using the tests, one also makes use of his clinical knowledge and of the many factors which make each case an individual study. In a general way, one can say that a 25% output of phthalein in the first hour when injected intravenously is about the minimum limit for a nephrectomy. On the other hand, a total output of 10% if the kidneys are in a stable condition may not contraindicate a prostatectomy. While the use of functional renal tests in prostatectomy has nothing to do with cystoscopy, as in prostatectomy cases we simply desire to know what the total renal function is, I cannot leave this part of the paper without saying a word in favor of functional tests in prostatic hypertrophy. Wherever there has been long standing obstruction in

the urinary tract, dilatation of the ureters and kidney pelvis, atrophy of the kidney parenchyma and infected kidneys often ensue without any adequate clinical symptoms indicating these conditions. Functional tests in these cases show a delayed and deficient output and enable us by a proper preliminary treatment, maybe lasting days or weeks, to get the kidneys to functionate at their highest standard so that a successful operation will result where otherwise a fatality would have ensued. Up to 1908 more than one-half of Freyer's immediate deaths following prostatectomy were due to uremia. (432 patients—29 deaths—17 uremia.)

Pyclography. In 1906 Voelcker and Lichtenberg described filling the bladder, ureters, and kidnev pelves with collargol in order to make them visible in radiograms, and this was called by them pyelography. The normal bladder empties itself at every urination and likewise the kidney pelvis empties itself with each pelvis contraction and resents artificial filling much more than does the bladder, so that a pyelogram of the normal kidney is never very sharply defined. If it is, it indicates a beginning dilatation. The normal kidney pelvis has hardly any capacity (Hallé). The anatomical kidney pelvis has a capacity of 1 to 2 c. c. and the surgical pelvis 2 to 4. Legneu says pyelography permits diagnoses which could not be made without it, it often completes and rectifies diagnoses made in other ways, e. g., a patient with abdominal pain operated upon for appendicitis, but not relieved, X-ray negative, ureteral catheter showed a small amount of residual urine, pyelogram showed an enormous pocket in the kidney. In hydronephrosis it is sometimes the only possible method of diagnosing the condition. Without pyelography, most small hydronephroses will be overlooked. In kidney tumors and in abdominal tumors thought possibly to be kidney tumors and in displaced kidneys, it is a very valuable and sometimes indispensable aid in diagnosis.

#### SUMMARY.

Ureteral catheterization cannot always be done.

- 1. In greatly contracted bladders.
- 2. Prostatic hypertrophy—some cases.
- 3. When hemorrhage is very marked, or the bladder very dirty.
- 4. When the nreter mouth cannot be seen in ulcerated bladders or when the month is in a diverticulum.
  - 5. Young children.

Errors in results in functional kidney tests must be determined when leakage occurs between the ureter wall and ureter catheter, and when kidney inhibition due to the kidney catheter occurs.

Contra-indications to cystoscopy. Any acute inflammation of the urethra, prostate or bladder.

Contra-indications to pyelography.

- 1. Tuberculosis of the kidney.
- 2. Hemorrhage of the kidney.

#### DISCUSSION.

Dr. W. C. F. Witte, Milwaukee: This paper has again made us realize the necessity of going into greater detail in the examination of our patients suffering from surgical affections of the urinary tract, before subjecting them to operative treatment.

I know of no surgical condition which gives to the operator a greater feeling of safety than the knowledge of the functional value of each kidney before operation.

We may then combat any complications following the operation, with a feeling of confidence and certainty, a marked contrast to the maze of uncertainty and hesitation one experiences in handling a case of anuria, when we do not know whether the remaining kidney could under the most favorable conditions perform the necessary function.

Any one who has been so unfortunate as to witness a death from anuria, following a nephrectomy, will have experienced some decided sensations during the five or ten days before a fatal termination occurred.

The writer has called our attention to many details which properly belong to a specialist, and it is my intention to devote the time allotted to me to view these cases from a general surgical standpoint.

Cases with kidney or bladder lesions coming to us may be divided into two classes, First, those requiring operative cystoscopy, as for example certain types of papilloma, to which the writer has called our attention, and those pathological conditions requiring pyelography or cryoscopy. All these cases should, I believe, be referred to one who has devoted special attention to this work, as they require the use of special, very delicate instruments, and a considerable skill in their use, as well as experience in the correct interpretation of the findings, for without this experience the result obtained is worthless. This class of cases constitutes a rather small percent of those requiring cystoscopic examination.

Second, those cases in which a simple cystoscopy or catheterization of the ureters is of the greatest value in determining the diagnosis, and the proper surgical treatment.

This group includes by far the greater number of pathological conditions of the kidneys, ureters and bladder, requiring surgical intervention. These cases should all be examined cystoscopically, either by ourselves or referred to some one proficient in this line of work.

In cases requiring prostatectomy, experience has shown that all cases are not alike suitable for suprapuble or perincal operation. By a simple cystoscopy we can determine which route is best, and if we choose

the perineal operation we do not have to spend valuable time in exploring the bladder, for we have already determined the presence or absence of a vesical calculus.

Only recently I determined to my own satisfaction the non-operability of a carcinoma of the cervix by a eystoscopic examination, there was only a moderate involvement of the cervix, but the patient complained of frequent micturition, and so I examined her. From the corrugated appearance of the bladder, the distention of the blood vessels, the lack of distensibility of the bladder over the involved area, all convinced of its involvement by the carcinoma, and that there was no hope of curing the patient, and any operation was liable to be followed by a vesico-vaginal fistula.

A short time ago, a case was referred to me with a diagnosis of intestinal obstruction. The patient had not responded to the use of enemas or cathartics, she was vomiting material that had a fecal odor, but she was not greatly distended, and complained of a severe pain in the region of the left kidney. She was somewhat deshy and hard to examine, but I detected some rigidity in the left side, and determined to find out the function of the kidneys.

A specimen of urine was obtained from the bladder and found to be practically normal.

On cystoscopic examination, I found out that all the urine was coming from the right kidney, the left ureter being entirely inactive. I inserted a catheter a short way, when I noticed a plug at the opening of the ureter, and upon withdrawing the catheter, a plug composed of pus, about two inches long and the diameter of a goose quill, was expelled, followed immediately by a gushing of urine and purulent material.

The pain was immediately relieved, and the nausea and vomiting ceased, the bowels moved, and the patient was comfortable.

Subsequent examination showed that the right kidney was secreting four times as much urea as the left, and the urine was free from pus.

A nephrectomy was done on the left side, followed by an uneventful recovery.

It is in cases like this one just cited, and in cases of tumors of the bladder or kidneys, in tuberculosis of one or both kidneys, in hemorrhage from the bladder or kidney, as well as in renal calculi, that the surgeon derives the greatest benefit from cystoscopy and ureteral catheterization.

Personally I like to have a complete X-Ray examination made, as this often gives us valuable information as to the relative size of the two kidneys, their position, or whether the individual has two kidneys as once in about four thousand cases one kidney is absent, manifestly a contra-indication for nephrectomy, or we may learn of the presence of renal calculi, which may not have been suspected.

This combined with the complete examination of the urine obtained from each kidney, and the observation of the relative activity of each kidney, as obtained by the indigo-carmine test, will give much valuable information and, taken in connection with the history of the case, we can make a reasonable diagnosis and base our treatment thereon.

This requires time and study, but it is the least we can do in any case. Some cases may require more extensive examinations such as the writer of the paper has so clearly put before us.

In conclusion, I would like to ask Dr. Fletcher:

1st, In what percentage of cases in which he catheterizes the ureters does he find blood in the specimen, the result of traumatism produced by the catheter, and how does this affect the conclusions he makes?

2nd, What is the danger of infecting a normal ureter or kidney, by catheterization, in the presence of tuberculosis of the bladder or opposite ureter and kidney?

Dr. A. H. Levings, Milwaukee: Some years ago 1 went to Europe for the purpose of making a special study of cystoseope and catheterization of the ureters. I, with others, took a course with Dr. Casper. He showed us his cystoscope, explained its mechanism, and sold us a manikin of the urinary bladder upon which we were to practice catheterization of the ureters. I bought Casper's and Nitze's cystoscopes, but after returning home I was soon impressed with what seemed to me a fact, namely, that the general surgeon had not the time to make himself proficient in this branch of practice.

I believe that this is a special field in which, in order to become an expert in technic, and skilled in diagnosis, will require practically all of one's time.

The cases which have puzzled me the most are those in which I find blood or pus in the urine. One can generally determine by the symptoms and the ordinary methods of examination, aided perhaps by the use of the cystoscope, whether the pus comes from the bladder or from the kidneys, if having excluded the bladder if there are no physical signs or symptoms pointing to the kidney affected, it has been impossible for me to determine this fact without having the urcters catheterized.

In a case which recently came under my observation, the patient was passing both blood and pus with the urine. She had considerable pain in the right kidney region; kidney was palpable and enlarged. It was demonstrated by the cystoscope that the bladder was practically normal. I sent this patient to Dr. Fletcher, and asked that he catheterize the ureters. He did this, and reported to me that pus was coming from both kidneys, although the greatest amount was from the right. He also determined that the functional capacity of the two kidneys was only about 66 per cent of what it should be. He advised against operation, and I sent the patient home. Probably without catheterization of the ureters I would have operated upon the right kidney and possibly have lost my patient.

There is one point in the Doetor's paper that I feel like taking slight exception to. He states that a surgeon who sees a patient today, with an enlarged prostrate or stone in the kidney, and operates tomorrow is not doing modern surgery. It is my custom in this class of cases to have the urine collected for twenty-four hours, and if the amount is practically normal and the solids normal, and the microscope shows not more than a few hyaline casts, and there is practically an absence of albumen, that I would not hesitate on the following day to remove the prostate or remove a stone from the kidney.

I am quite frequently meeting with eases of genitourinary disease in which I am unable to make a positive diagnosis or to determine accurately whether an operation should be performed or not.

In this class of eases I am very glad to avail myself of the skilled services of Dr. Fletcher, for I have confidence to believe that when he tells me the results of his examination I can rely upon them.

#### **BOOK REVIEWS**

A Practical Text-Book of Infection, 1mmunity and Specific Therapy with special reference to immunologic technic. By John A. Kolmer, M. D., Dr. P. H., Instructor of Experimental Pathology, University of Pennsylvania, with an introduction by Allen J. Smith, M. D., Professor of Pathology, University of Pennsylvania, Octavo of 899 pages with 143 original illustrations, 43 in colors. Philadelphia and London. W. B. Saunders Company, 1915. Cloth, \$6.00 net, Half Morocco, \$7.50 net.

This is the first book of its kind in English which has come under the Reviewer's notice. There have been books on Infection and Immunity and small laboratory manuals, but this is unique in that it combines the elements of Immunology with the most elaborate of the complement—fixation tests, discusses infection, immunity (active and passive), anaphylaxis, chemotherapy, etc., etc.

Dr. Kolmer wrote his book with a threefold purpose:

- "1. To give to practitioners and students of medicine a connected and coneise account of our present knowledge regarding the manner in which the body may become infected, and the method, in turn, by which the organism serves to protect itself against infection, or strives to overcome the infection if it should occur, and also to present a practical application of this knowledge to the diagnosis, prevention, and treatment of disease.
- "2. To give to physicians, engaged in laboratory work and special workers in this field, a book to serve as a guide to the various immunologic methods.
- "3. To outline a laboratory course in experimental infection and immunity for students of medicine, and those especially interested in these branches."

A perusal of this 900-page book leaves no doubt that the author has accomplished what he set out to do. There is a wealth of information, collected from all sources, and now given to us in compact, convenient and authorative form. The new science of Immunology, which almost seems to have grown like the legendary Bean-Stalk, has already gathered to itself such a vast literature, produced by the feverish activity of numerous workers, that it is with a feeling of profound gratitude that we extend to Dr. Kolmer our thanks for lightening a burden which bid fair to overwhelm us.

The section devoted to class exercises in experimental infection seems especially timely. Unless the future

practitioners acquire the basic facts as students, they will lose the meaning of modern medicine,

We take particular pleasure in recommending this book

DISEASES OF THE DIGESTIVE ORGANS. With Special Reference to their Diagnosis and Treatment. By Charles D. Aaron, Sc. D., M. D., Professor of Gastro-enterology in the Detroit College of Medicine and Surgery; Consulting Gastro-enterologist to Harper Hospital. Octavo, 790 pages. Illustrated with 154 engravings, 48 roentgenograms and 8 colored plates. Cloth, \$6.00, net.

For those who believe that the specialty of Gastroenterology has a reason for existence, or for those who wish to know a variety of tricks to play upon people who have stomach or intestinal symptoms, this book of over 700 pages is to be recommended.

To the average doctor not deeply versed in the occult lore of the seienee, (sie) the book, as a whole, is disappointing. This is no fault of the author, but of the subject. Now-a-days, with more and more accurate methods of diagnosis, it appears superfluous to devote nearly one hundred pages to the various Neuroses of the stemach. There is actually a chapter on Nervous Dyspepsia, and, by the way, one notes the omission of incipient pulmonary tuberculosis as a not infrequent cause of "Nervous Dyspepsia".

Everything from the month to the anus is touched upon, and side excursions are made into the regions of the panereas, liver, and gall-bladder. Dozens of prescriptions are seattered throughout the book. The one method of investigation which has given us much exceedingly valuable information concerning the gastro-intestinal tract, and bids fair to give us more, Roentgenoscopy, is covered in ten pages.

In some ways it is a good reference book, for there are chapters on Massage, Diet, Mineral Springs, the Methods of Hyperalimentation, etc. Then there are a number of diet lists with the caloric values of the various food-stuffs, which could be of great help to one looking for a certain kind of diet.

We note that the author gives Sahli's Desmoid test and the glyeyltryptophan test, both of which have been shown to be useless. We most heartily agree wih him on p. 132, where he says: "Ten cents worth of eow's milk will give the same number of calories as three dollars worth of sanatogen, and the latter has no more favorable effect than cow's milk."

The practitioner who does not allow himself to be hypnotized by all the fan-fare of names, faney apparatus, and cute little bucket tests will no doubt find much that is interesting, instructive, and helpful in this book. We may, however, be permitted to express the view that the book is not absolutely needed, it fills no erying want, and in an age as this, when more books are published than are actually essential, it only adds one more to the superfluity of books on the subject.

The volume is niecly bound in dark brown cloth, is about two and a half inches thick, and will take up quite a space on a book shelf.



LOUIS F. JERMAIN, M. D.,
PRESIDENT STATE MEDICAL SOCIETY OF WISCONSIN,
1915-16.

Dr. Louis Francis Jermain of Milwaukce, who was elected president of the State Medical Society of Wisconsin at the sixty-ninth Annual Meeting, held at Milwaukee, October 6-8, 1915, was born in Manitowoc County, Wisconsin, October 10, 1867. His preliminary education was obtained in the public and normal schools of Wisconsin. After graduating from the normal school he taught in the public schools of Wisconsin for six years. In with the exception of one year—1910—spent in April, 1894, he was graduated from the Northwestern University Medical School, Chicago. He has practiced at Milwaukee since his graduation study in Vienna and Berlin.

Dr. Jermain was assistant commissioner of health of the city of Milwaukee from 1898 to 1910. He has been a teacher of internal medicine in Milwaukee medical schools since 1895. He took a most active part in the reorganization of Milwaukee's medical schools in 1912 and 1913, and has been Dean of Marquette University School of Medicine since the reorganization.

Dr. Jermain was president of the Medical Society of Milwaukee County 1909-1910, and is president of Milwaukee Medical Society for 1915. He is a member of the Medical Society of Milwaukee County, Milwaukee Medical Society, Chicago Medical Society, the State Medical Society of Wisconsin and the American Medical Association.

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L. M. WARFIELD, M. D., Editor 83 Wisconsin Street, Milwaukee J. P. McMAHON, M. D, Managing Editor 141 Wisconsin Street, Milwaukee

#### Publication Committee:

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OCTOBER, 1915

No. 5

#### **EDITORIALS**

#### HONOR ROLL.

ON OCTOBER 15TH THE FOLLOWING SOCIETIES HAD EQUALLED OR PASSED THEIR 1914 MEMBERSHIP. THOSE MARKED WITH A STAR HAVE MADE A GAIN THIS YEAR.

ASHLAND-BAYFIELD-IRON BARRON-POLK-WASHBURN-SAWYER-BURNETTE\*

BROWN-KEWAUNEE\*

CHIPPEWA LINCOLN. MAXITOWOC\* COLUMBIA DODGE MARATHON DOOR MILWAUKEE\* DUNN-PEPIN\* MONROE EAU CLAIRE\* OZAUKEE\* FOND DU LAC\* OUTAGAMIE IOWA\* PRICE-TAYLOR\* **JEFFERSON** RACINE JUNEAU RICHLAND RUSK\* LA CROSSE\* LA FAYETTE SHAWANO\* LANGLADE\* ST. CROIX TREMPEALEAU-JACKSON-BUFFALO\* VERNON\* WAUPACA\* WALWORTH\* WINNEBAGO\* WASHINGTON\* W00D\* WAUKESHA\* -R, S.

#### THE STATE MEDICAL SOCIETY MEET-ING.

The Sixty-ninth Annual Meeting of the State Medical Society of Wisconsin which was held in Milwaukee, October 6-8, beat all records for attendance, sustained interest in the program, enthusiasm, and harmony. The Society has the largest membership in its history and the Secretary tells us that a comparison of our records with those of other states shows that the percentage of Wisconsin physicians who are members of the State Medical Society is higher than in any other state in the Union.

Out of a total membership of nearly eighteen hundred over five hundred and fifty were registered at this meeting.

The writer does not remember a meeting at which the papers were listened to with greater interest or with more enjoyment. Part of this, no doubt, was due to the excellence of the program, and the Program Committee must be given due credit for their share in the success of the meeting; but another part is due to the fact that the members of the medical profession are waking up and are interested in their work and are learning that it is worth while to come to medical meetings of this character in order to keep up with the progress of the medical world.

We were fortunate in having with us an unusual number of distinguished visitors, and the presence of Dr. Rodman of Philadelphia, President of the American Medical Association, Dr. Craig of Chicago, its Secretary, Dr. L. F. Barker and Dr. Joseph C. Bloodgood of Baltimore, Dr. John B. Murphy and Dr. H. Gideon Wells of Chicago, and Dr. Fred T. Murphy of Washington University, St. Louis, was surely warranted to make the meeting a memorable one.

The Public Meeting to discuss the Cancer Problem was a great success and the large Lecture Hall of the Public Museum was crowded to the doors. It is a hard task to try to educate the public to a sane knowledge of the dangers of cancer without creating a hysterical dread of the disease, but the speakers of the evening Drs. John B. Murphy, W. L. Rodman, and Joseph C. Bloodgood seemed to be particularly skilful in avoiding this pitfall and it is to be hoped that the educational work which was commenced at this meeting may be continued along equally sensible lines.

A brief summary of the proceedings of the House of Delegates will be published in the November number of the Journal so that the members may be fully and promptly informed of all that is being done in their behalf.

The action of the Society in electing Dr. L. F. Jermain of Milwaukee to the presidency for the coming year is one which will meet with universal approval. Dr. Jermain's work for the State Medical Society, for his County Society, and for the elevation of the standards of medical education in Wisconsin has placed him in the front rank of our medical citizenship. No better choice could have been made

Madison has been selected as the place of meeting in 1916 and with the present plan of having the meetings in October this choice is sure to be popular with the Society as a whole.

#### THE MEETING OF THE WISCONSIN MEDI-CAL WOMAN'S SOCIETY.

The most successful meeting ever held by the Wisconsin Medical Woman's Society was that which occurred on October 4 and 5 at Milwaukee. The program was of unusual interest. In every respect the Society is in a most flourishing condition and the work which it is doing is of a most creditable character.

It is proposed to hold the next meeting in conjunction with the women physicians of Iowa and Minnesota.

THE MEETING OF THE WISCONSIN EYE, EAR, NOSE AND THROAT SPECIALISTS.

The second annual meeting of the Wisconsin Eye, Ear, Nose and Throat Specialists held at the Hotel Pfister Red Room on Oct. 8th and 9th, 1915, was a great success in every way.

Dr. James Bordley, Jr., of Baltimore, Md., the principal speaker on the eye, gave a most interesting illustrated discourse on "Diseases of the Eye Associated with Diseases of the Nose and Mouth".

Dr. S. J. Kopetzky of New York was the principal speaker on the car and his address, "Advances in Otologic Diagnosis," was received with a great deal of interest and enthusiasm.

Dr. Myron Metzenbaum of Cleveland, Ohio, performed his septum operation at Trinity Hospital after the close of the meeting.

A smoker at the University Club followed the first day's session.

On Saturday, Oct. 9th, clinics were held at the Milwaukee Hospital, Trinity Hospital, Children's Hospital and Soldiers' Home.

Eighty-eight registered on the first day and this State was represented by specialists from thirty different cities.

The guests came from various cities including New York, Baltimore, Kansas City, Denver, Cleveland, Detroit, Aurora, Chicago and Wadina, Minnesota.

#### THE CHANGE OF EDITORS.

With this number of the Wisconsin Medical Journal, the present editor lays down his pen after five years of service to the State Mcdical Society. On behalf of Dr. L. M. Warfield, who will succeed him in office, he asks for a continuance of the friendly and helpful spirit of co-operation, which the members of the State Society have already extended to the editors in the past.

Editing a medical journal, especially when that journal is the official publication of a State Medical Society, is not an easy task, and in order to carry on the work as one would like to see it done, all of the editor's time might well be devoted to this work alone. But under the present order of things, the editor cannot possibly give his whole time to the work. He must make his livelihood in the practice of medicine, and as we all know

that does not leave as much time for reading, investigating, reflecting and writing as one would desire.

The retiring editor feels that he has left undone many things he would like to have done, simply because time was lacking for the work, although he can honestly say that he has done his best.

But in turning over the editorship to Dr. Warfield, the writer feels that new energy, ability and enthusiasm will be brought to the work, and that under these happy auspices the Journal will rise to higher levels of achievement and usefulness than ever before.

#### HOW WISCONSIN STANDS.

MEMBERSHIP ROSTER OF STATE MEDICAL SOCIETIES.

Percentage of members to total number of physicians in the state as per 1915 report of A. M. A.

sicialis in the state as per	1010 101010 01 11. 11. 11.
Percentage	Percentage
Hawaii	Ohio
WISCONSIN	Kentueky
Virginia	West Virginia50
New Hampshire	Wyoming
Alabama	Indiana
Minnesota	Missouri
Illinois	Oklahoma
North Carolina	Montana
Massachusetts	Mississippi
Miehigan	Utah
Vermont	California
Arizona	Kansas
Connecticut	South Dakota
Texas	Porto Riea
Nebraska	Oregon
Canal Zone	Florida
Iowa	Arkansas
South Carolina55	Delaware
North Dakota54	Louisiana
Georgia	Dist. of Columbia39
Rhode Island	Colorado
Washington	New Mexico34
Pennsylvania	Tennessee
New Jersey	Nevada
Maine	Idaho
Maryland 52	Phillipine Islands13
New York	

THE NEW LAW GOVERNING THE MAKING OF WASSERMANN TESTS BY THE STATE.
[No. 651, A.]

Chapter 307, Laws of 1915.

An Act.

To ereate section 561jn of the statutes, relating to the board of control.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

Section 1. There is added to the statutes a new section to read: Section 561jn. The board of control is hereby authorized to make necessary arrangements with the laboratory of the psychiatric institute of Mendota for the giving of the Wassermann test to any person confined in any state or county institution, and of making such test for any practicing physician of this state who makes application therefor in behalf of any resident of this state, free of charge. Arrangements shall also be made with said institute for the making of chemical examinations of the ecrebrospinal fluid for any practicing physician of this state free of charge.

Section 2. This aet shall take effect upon passage and publication.

In compliance with this law, the Board of Control has made the necessary arrangements with the Psychiatric Institute to make Wassermann tests on a very large scale. The following rules and regulations have been adopted:

The physician may apply to the Institute for suitable containers or blood takers. He will also be supplied with a statistical data sheet. Within a few weeks the Institute will issue a pamphlet of suggestions and information concerning Wassermann tests and the rules governing the making of these tests as well as the manner of reporting upon the examination and suggestions as to the interpretation of results. It is expected that the physicians will fill out statistical data blanks as far as their information will permit. In this manner very valuable data will accumulate which ultimately will be of benefit to the practicing physicians. It is suggested that a blood specimen be sent so that it will be received at the Institute on either Monday, Tuesday, Wednesday, Thursday or Friday. The report upon the examination will be made directly to the physician who submits the specimen. At the Institute, the statistical data blanks and all information pertaining to the blood specimen that has been submitted for examination will be filed under the name of the physician who submits the specimen.

The Institute has experimented with various sized containers for the shipment of blood specimens through the mails and it has been learned that a small narrow vial such as a homeopathic vial or a similar shaped glass container gives the best results. About three cubic centimeters of blood is sufficient for a blood examination. This also applies to cerebrospinal fluid. Approximately three cubic centimeters will suffice for all the tests that will be applied. In the cerebrospinal fluid examination, the following will be

made: Wassermann test, a chemical examination for globulin excess and Lange's colloidal gold chlorid test (Gold Sol) and a cell count when this is practicable.

The purpose of the establishment of this law was to prevent paresis, locomotor ataxia and the late syphilitic manifestations. It was contended that with the free use of the Wassermann test, the treatment of a case of syphilis could be controlled. Definite knowledge as to the existence of a cure could be obtained. If every case of syphilis is adequately treated and cured, these late syphilitic manifestations will be prevented and the State greatly benefitted. It is therefore hoped that the physicians of the State will make free use of the provisions of this Law.

The pamphlet of information and suggestions will be ready for distribution within a few weeks, and may then be had upon application.

A copy of the blank to be filled out and sent to the laboratory with each specimen follows:

#### FOR WASSERMANN TEST.

Serum Physician Address
Name Residence
Specimen labeled
Sex Age Civil condition
History of syphilis
Physical evidence of syphilis
Approximate duration of infection
Treatment used and over what period
Time elapsed since last treatment
Diagnosis
Results of previous tests
Spinal fluid findings, if examined
Remarks;

#### DIRECTIONS.

Under serum, designate whether blood or spinal fluid. Insert physician's name and address in place designated. Label specimen preferably by initials or series of numbers. See that marking on label agrees with mark shown in statistical blank. Under history of syphilis state whether the infection is admitted or denied. If denied, any significant history such as skin rashes, sore throat, or venereal disease, chancroids, sears on genitals, miscarriages, etc. Under physical evidence of syphilis, give any physical abnormalities due to syphilis or if none exist, state so. Under approximate duration of infection, give time that has elapsed from the present to the date when the infection was probably received. Under treatment used, and over what period, state the character of drugs employed, method of administration and over what length of time treatment was given and clinical results. Under time clapsed since last treatment, state the number of days, weeks, months, or years since patient received any antisyphilitic treatment and the

nature of this treatment. Under diagnosis, give physical diagnosis and mental, if a psychosis exists. Under results of previous tests, state whether any have been made and if made approximately when, and the result. Under remarks give any additional information which is of interest and bears upon the question of syphilis.

#### THE ANTI FEE-SPLITTING BILL.

In the August number of the Wisconsin Medical Journal was printed the amended law against fee-splitting but time did not permit comment upon it then. It is regrettable that any legislation is necessary, on the subject, but if there must be a law it should be as comprehensive as possible. It will be seen by looking over the new form of the statute that both the giver and the receiver of the commission are guilty of criminal fraud punishable by fine or imprisonment and by annulment of the license to practice. As both parties to this vicious traffic are equally guilty this seems reasonable, but it may make the work of securing a conviction doubly hard.

To the average law-abiding, self-respecting physician the new subsection 2 a will be of the greatest importance. This provides that "any physician, surgeon, nurse, anaesthetist, or medical assistant or any medical or surgical firm or corporation who shall render any medical or surgical service or assistance whatever or give any medical, surgical or any similar advice or assistance whatever to any patient for which a charge is made from such patient receiving any such service, advice or assistance, shall render an individual statement or account of his charges therefor directly to such patient, distinct and separate from any statement or account by any other person, firm or corporation having rendered or who may render any medical, surgical or any similar service whatever or who has given or may give any medical, surgical or any similar advice or assistance to such patient. Any violation of this provision shall be punishable by the penalty prescribed in subjection 1 of this section."

This is of the greatest importance as it has been customary to include the fees for the anesthetist and the assistant and for laboratory examinations in the surgeon's bill in a great many instances. Under the new law this is forbidden and the penalty for breaking this law is as severe as that for fee-splitting.

Of course the idea behind this last provision is

that often fee-splitting is carried out under this disguise and that therefore the penalty should be the same.

When the situation is generally understood there will be no great hardship in earrying out the requirements of the law although there will be considerable inconvenience and some money loss, for patients will be sure to neglect some of the bills if several separate ones are rendered by different individuals.

The important thing for us to remember is that this is the law as it stands today and that we are expected to know its provisions and guide ourselves accordingly.

If by obeying this law we are able to help in removing from the medical profession the reproach which has been brought upon it by the fee-splitter and the giver of commissions, our personal inconvenience and even our money loss should be cheerfully endured.

#### HYDROPHOBIA AND ITS TREATMENT.

A recent meeting of the Chicago Medical Society was devoted to a discussion of rabies and a number of interesting papers dealing with different phases of the subject were presented. Dr. H. B. Hemenway ealled attention to the fact that in the human subject the incubation period varies from three to more than seventy days. Law says that 6 per cent. are under eighteen days incubation; 60 per cent are from eighteen to sixty-four days, and 34 per eent are over sixty-four days incubation. In dogs it varies from 6 to 240 days. Cases of fatal human sickness have been reported from the eating of the flesh of rabid cattle and hogs. It has been claimed that the disease has also been transmitted through the drinking of milk of rabid animals, although such cases are not scientifically above suspicion of other methods of transmission.

He also remarked that in case of a suspicious bite it was formerly the custom to cauterize the wound with nitrate of silver or other caustics. His advice is emphatically against such a practice. These caustics eoagulate the albuminous material around the wound and seal the virus in the tissues. On the other hand, formaldehyde is quite as efficient upon the germs and it has a penetrative power in the tissues. It has long been Dr. Hemenway's custom in suspicious cases to use formalin in full strength, and he understands that more recent ex-

periments at the University of Michigan have demonstrated the almost specific action of this drug in such cases.

Dr. Lagorio, whose experience in connection with the Chicago Pasteur Institute is based upon nearly six thousand cases treated during the last twenty-five years, believes that if the wound is superficial nitric acid is the best cautery, but that if the wound is badly lacerated and involves the subcutaneous tissue, the best thing is to irrigate the wound the same as one would any other infected wound. If the large teeth of an animal should make a pocket, the wound should be slit open freely and formaldehyde solution or bichlorid of mercury used. One may swab the wound with tincture of iodine. A practice he has been resorting to is to squeeze the juice of a lemon into the wound, which neutralizes the poison in a short time.

The wound should be washed thoroughly with some antiseptic solution. It may be swabbed with cocaine to prevent pain and then lemon juice squeezed into the wound and allowed to remain for five or ten minutes.

In the prevention of hydrophobia Dr. Hemenway emphasizes the importance of the muzzling of dogs. The strict enforcement of laws requiring the muzzling of dogs has proven effective. This was shown in Berlin. During the nine years ending 1853 there was 378 rabid dogs brought into the Berlin Veterinary College. Then the muzzling ordinance was put into operation. In 1854 there were four cases; in 1855 and in 1856 there was one case for each year; in the next five years there were none. In 1879 Holland passed such a law. From 1877 the disease was unknown except on the borders or among imported animals.

The experience in England is especially interesting. In 1887 there were 217 cases of rabies; in 1888, 166 cases; in 1889, 312 cases. Then a muzzling ordinance was passed and enforced with the following result: In 1890 there were 129 eases; in 1891, 79 cases; in 1892, 38. Sentimentalists raised such opposition that the enforcement was relaxed and the eases increased: In 1893, 93 cases; in 1894, 248 cases; in 1895, 672 eases. Again the muzzling was enforced. In 1896, 438 cases; in 1897, 151 cases; in 1898, 17 cases; in 1899, 9 cases; in 1900 and since, none.

In considering the importance of rabies at the present time Dr. D. M. Campbell stated that the north side of Chicago, Evanston and the North

Shore towns to and including Highland Park, have experienced as many cases of rabies since October last as they had seen in the preceding five years. Because of this liability of rabies to become rapidly disseminated, no country in which it exists can afford to relax, for a moment, such measures as it finds itself able to adopt for its control, and no country in which the disease does not exist can afford to relax the strictest quarantine on the imported dogs, and this quarantine should also be extended to foxes and wolves.

The examination of the brain for negri bodies is, of course, a reliable test, but Dr. Campbell does not consider it infallible. He knows of one case where 169 smears were examined without finding negri bodies, and in the 170th smear numbers of these bodies were found. He thinks it is unusual for a pathologist to examine this number of specimens before rendering a negative diagnosis, and a negative diagnosis so rendered is not infallible. Dr. Zell of Chicago has diagnosed probably a dozen or more cases in the Veterinary Hospital from a blood examination and has made no failures. method possesses one immense advantage over the microscopic examination of the brain—the possibility of the diagnosis being made without destroying the animal.

The treatment of hydrophobia was discussed by Dr. Antonio Lagorio who said that one important point that has impressed him deeply is that while several years ago he had many cases of truly developed hydrophobia in the human being brought to the institution in a condition where he could not do anything for them, these cases have gradually become less and less in number, so much so that in 1914 he only had occasion to see two cases of hydrophobia in human beings. The result has been brought about by the teachings and the spreading of information by the medical profession everywhere in every state and county in the United States.

During the last twenty-five years there have been treated at the Chicago Pasteur Institute 5,823 cases with a mortality of 0.13 per cent. Nine person for reasons unknown, abandoned the treatment after two or three days after beginning same. Three of these subsequently were reported to have died of hydrophobia. Eighteen persons were attacked with the disease at the institute while under treatment, due to the lateness of coming, or to the exceptional gravity of the bites on the face, the dis-

ease developing before the treatment could bring the patients to the immunized state. Forty-nine dogs and eight horses were successfully treated.

January 1, 1911, Dr. Lagorio abandoned the treatment with dried spinal cords, and has adopted instead the fresh brain solutions. He has treated with this method to date 1,361 patients; number of injections given of these solutions, 44,913, with the result that there was no mortality and no infection.

In severe bites of the head and face an antirabic serum is added, which has the property of bringing the patient to the immunizing stage quicker than by all other methods that have been used.

Sometimes human beings who are being treated, will attack the physician, scratch him, spit upon him, and naturally infection may be transmitted in this way. As to whether the saliva of a hydrophobic human being can produce the disease in others is a question that has not been satisfactorily settled, but if a person is exposed to infection from the saliva of such a human being, he should be given the benefit of the doubt and put upon treatment.

In the table presented by Dr. Lagorio showing the number of cases from different states, Wisconsin is third on the list with 388 cases, so the subject is one which should be of interest to Wisconsin physicians, and the location of the recent outbreak in Illinois, so close to our southern border, is an added reason for unusual watchfulness.

#### COMMON SENSE IN PRESCRIBING.

Physicians have sometimes felt that the retail druggists were not very helpful in the fight against the nostrum evil and the promiscuous use of proprietary preparations. On the other hand the druggists have been able to prove conclusively from their prescription files that the general practitioner has very often permitted himself to be taught by the "detail men" from the big proprietary houses rather than by the professor of therapeutics.

The following letter is therefore a most encouraging evidence of a desire to get together and to work together.

MILWAUKEE PHARMACEUTICAL ASSOCIATION.

MILWAUKEE.

Dear Doctor:-

The American Medical Association, the American Pharmaceutical Association and the National Association of Retail Druggists have done a great amount of good work in the past few years by way of helping physicians to serve the welfare of their patients through prescribing for them the preparations of the United States Pharmacopeia and the National Formulary.

These Associations deserve unstinted praise for what they have accomplished in making known to physicians throughout the Country the advantages of discontinuing the use of proprietary and trade named articles—articles that are not recognized in the Pharmacopoeia or the National Formulary. These are the books which are revised by a committee consisting of experienced physicians and pharmacists, professors of the leading medical and pharmacy schools. They were made official standards by the national government by an act of congress in 1906.

The U. S. P. and N. F. preparations are meritorious for many reasons.

They are of known strength, composition and quality.

They are obtainable from every capable pharmacist.

By their intelligent usc, incompatibility is avoided.

Incompatibility is almost unavoidable and cannot be

anticipated in the case of secret formula.

For these important reasons the U. S. P. and N. F.

For these important reasons the U. S. P. and N. F. preparations should always be prescribed in order to insure uniformity, reliability and satisfactory results.

The disadvantages, to the physicians as well as to his patients in prescribing proprietary preparations are numerous.

They are of secret and possibly unreliable composition. They are not standard and their composition is seldom known. They may be altered at any time to suit the purpose of the manufacturer without the physician becoming aware of the change.

Not infrequently such preparations are accompanied by circulars, the reading of which, by the patient and his family, encourage self medication.

Often they are advertised over the head of the physician, directly to the patient, after the physician's endorsement of them has been secured. In his manner the physician often becomes an unpaid agent for selling the nostrums.

Much more might be said on this subject but the foregoing will indicate what we have in mind and intend doing.

We feel that you are interested in whatever will assist to bring about better conditions in the practice of medicines and that we are entitled to and will receive your co-operation.

The Association is planning a Propaganda campaign of N. F. and U. S. P. Preparations. We will from time to time send you material by which we hope to keep you in close touch with the work. The movement we have taken up has grown to popularity throughout the country as you doubtless know. Many physicians gladly testify that it has resulted in benefits of the greatest value to the medical profession.

Fraternally yours,
THE PROPAGANDA COMMITTEE.

There can be no question that the suggestions made in this letter are reasonable and right.

It is the duty of the medical profession to act upon them. Let us renew our acquaintance with the United States Pharmacopeia and the National Formulary instead of spending all our time studying the price lists of our enterprising friends the drug manufacturers.

#### A GOOD START IN TUBERCULOSIS WORK.

The following petition received some 20,000 signatures, more than four times the required number, and passed at the June election, by a vote of 47,359 to 25,681. The ordinance was drawn and fathered by Dr. George E. Malsbary, the editor of the Southern California Practitioner.

To the Honorable, the City Council of the City of Los Angeles, County of Los Angeles, State of California.

Whereas, New York City, with one hundred and sixty-five municipal tuberculosis nurses, has recorded a diminution in the number of cases of tuberculosis from 32,065 in 1910 to 22,752 in 1912; and a reduction in the death rate from pulmonary tuberculosis in Manhattan and the Bronx from 427 per hundred thousand in 1881 to 190 per hundred thousand of population in 1912, a reduction of 55 per cent.; and

Whereas, The results obtained in New York City are ascribed largely to the employment of municipal tuberculosis nurses, in a communication from the General Medical Officer of the City of New York, Herman M. Biggs, dated December 18, 1913; and

Whereas, In the City of Boston, Massachusetts, "All cases of tuberculosis reported are visited by nurses—twenty-five in number—paid by the City, and it is rare there now to find a neglected or abandoned case, and there has been a diminution in the total number of deaths from tuberculosis and also in the ease rate"; and

Whereas, The City of Baltimore, Maryland, with a force of seventeen tuberculosis nurses has secured a reduction in both the cases and deaths from tuberculosis, so that the Commissioner of Health of that city declares that their work shows the need of many more tuberculosis nurses; and

Whereas, The City of Buffalo, New York, with a force of seventeen tuberculosis nurses, feels the need of more tuberculosis nurses; and

Whereas, The City of Cleveland, Ohio, with fifteen tuberculosis nurses and a record of good results, declares the need of more tuberculosis nurses; and

Whereas, The City of Columbus, Ohio, has six tubereulosis nurses; and

Whereas, The City of Los Angeles, California, has only one tuberculosis nurse and has shown an increase of about fifty per cent. in the reported cases of tuberculosis during the past year, and a large increase in the number of deaths from that disease; and

Whereas, The work in the eastern cities, above referred to, has shown that a visiting tuberculosis nurse cannot satisfactorily take care of more than one hundred cases of tuberculosis; and

Whereas, A recommendation similar to the following proposed ordinance, received the unanimous endorsement of the Nursing Commission of the City of Los Angeles January sixth, 1914, and has been endorsed by many of the leading business men, firms and organizations paying taxes in the City of Los Angeles; therefore,

The following ordinance is hereby proposed, to be adopted by the City Council of the City of Los Angeles, or, if the same be not adopted by said Council, the proposed ordinance then to be submitted to a vote of the electors of the City of Los Angeles as provided in the Sections 198-a, 198-b, 198-c, 198-d, and 198-e of the Charter of the City of Los Angeles governing the initiative; to-wit:

AN ORDINANCE PROVIDING FOR THE EMPLOY-MENT OF MUNICIPAL VISITING TUBERCULO-SIS NURSES.

Section 1. The Health Commissioner of the City of Los Angeles shall and is hereby empowered and directed to employ, in the name of and for the City of Los Angeles, municipal visiting tuberculosis nurses, in the proportion of one such nurse per one hundred reported cases of tuberculosis in the City of Los Angeles.

Sec. 2. The municipal visiting tuberculosis nurses thus employed by the Health Commissioner of the City of Los Angeles, shall be paid by the City of Los Angeles at the rate of compensation provided for Municipal Nurses in Section One of Ordinance Number 28, 179 (New Series).

Sec. 3. It shall be the duty of the municipal visiting tuberculosis nurses of the City of Los Angeles to visit professionally all reported cases of tuberculosis in the City of Los Angeles, excluding those under treatment in public or private hospitals or sanatoria, unless requested in writing not to do so by the patient or physician in charge.

Sec. 4. The Health Commissioner of the City of Los Angeles is hereby empowered to establish such supply stations as he may deem necessary from time to time for the professional use of the tuberculosis nurses provided for in this ordinance.

Sec. 5. The Purchasing Agent of the City of Los Angeles is hereby directed to purchase on requisition from the Health Commissioner such supplies as the latter may from time to time deem necessary for the professional use of the tuberculosis nurses provided for in this ordinance.

Sec. 6. The Health Commissioner shall divide the City of Los Angeles into appropriate sections or districts and shall assign one or more tuberculosis nurses to each and every section or district thus formed according to the number of cases of tuberculosis therein, exclusive of those under treatment in public or private hospitals or sanatoria.

The tuberculosis nurses shall be held responsible for their respective sections, but may at the discretion of the Health Commissioner be given work outside of the sections to which they are assigned. Now therefore, We, the undersigned qualified electors of the said City of Los Angeles, do hereby petition your honorable body to adopt the said ordinance for the City of Los Angeles, or, if the same be not adopted by Council, we hereby demand the submission of the said ordinance to a vote of the qualified electors of the said City of Los Angeles, in accordance with the sections of the City Charter of the City of Los Angeles governing the initiative.

#### NEWS ITEMS AND PERSONALS

Drs. W. W. Peck and R. B. Quinn have formed a partnership at Darlington for the practice of their profession.

Dr. Charles E. Phipps of Muncie, Ind., has taken up his duties as assistant surgeon at the Milwaukee National Soldiers' Home.

Dr. J. R. Kingsley will dispose of his practice at Sheboygan, and remove to Three Rivers, Michigan, where he will establish a hospital.

Dr. O. N. Mortenson, Waupaca, has disposed of his practice to Dr. Fremont E. Chandler of Chicago. Dr. Mortenson has not decided on a new location.

Dr. J. J. McShane, health commissioner of Kenosha, attended the annual session of the National Health Officers, held in Rochester, N. Y., in the early part of September.

Dr. George F. Adams, Kenosha, was on October 5 called to Memphis, Tenn., as an expert witness in the Graham will case.

Dr. F. W. SIEGMUND, Princeton, has returned from New York where he took a post-graduate course at the New York Post Graduate Medical School and Hospital and the New York Maternity Hospital, and is now associated with Dr. Bruno Schallern at Ripon.

Dr. B. C. Brett, Green Bay, was tendered a banquet on August 24th by the Brown County Medical Society, the occasion being the 82nd anniversary of his birth.

Dr. GILBERT E. SEAMAN has been elected a member of the Central Board of Education, at a recent meeting of the University of Wisconsin Board of Regents. The Central Board of Education is to consist of the governor, secretary of state, state superintendent of public instruction, one from the board of University regents, and the other from the board of normal regents.

DR. BERNARD F. McGrath has been appointed professor of experimental and junior surgery at Marquette University, School of Medicine. Dr. McGrath is a native of Massachusetts, a graduate of Georgetown University, and of Harvard University. He spent two and one-half years in the laboratories and clinics of Europe, served as attending surgeon at the Beverly, Mass., Hospital, and has been director of surgical research and assistant pathologist at the Mayo Clinie.

Drs. G. E. Seaman, Clarence Kenny, Milwaukee; H. Gray, La Crosse, and James Scott of Appleton, all identified with the Wisconsin National Guard, attended the recent meeting of Military Surgeons at Washington, D. C.

DR. CARL F. SEIFERT, Milwaukee, charged with violation of the Harrison narcotic law, waived examination before United States Commissioner Bloodgood, on August 26, and was held for the grand jury under bond of \$500. It was alleged that the physician did not make an accounting of the drugs used by him.

The Trustees of the American Medicine Gold Medal Award respectfully announce that the medal for 1915 has been conferred upon Dr. Rupert Blue, Surgeon General, United States Public Health Service, as the American physician who in their judgment has performed the most conspicuous and noteworthy service in the domain of medicine and surgery the past year.

WILLIAM J. ROBINSON,
H. EDWIN LEWIS,
JOHN W. WAINWRIGHT,
Trustees.

DR. R. C. RODECKER, Holcombe, has been appointed a member of the Wisconsin Board of Medical Examiners to succeed Dr. A. B. Bailey of Fennimore. Dr. J. M. Dodd, Ashland, H. W. Abraham, Appleton, and C. H. Ripley, Kenosha, have been reappointed members. All terms ending July 1, 1919. Dr. J. M. Dodd, Ashland, has been selected secretary of the board in place of Dr. J. M. Beffel, Milwaukee, Dr. Beffel, however, continuing on the Board, as his term expires in 1917.

Dr. S. D. Greenwood, Neenah, sustained a broken arm by the back-firing of his automobile on Oct. 1st. The injury is the second suffered by him in the same manner.

Drs. G. WINDESHEIM, Kenosha and T. L. HARRINGTON, Milwaukee, have been named to take charge of the arrangements and program features for the annual convention of the Wisconsin Anti-Tuberculosis Association in Milwaukee, November 18, 19 and 20.

Dr. G. Windesheim, Kenosha, has returned from the annual meeting of the Mississippi Valley Association in the fight against tuberculosis recently held in Indianapolis. Dr. Windesheim declares it to have been one of the most important and interesting meetings ever held by the foes of tuberculosis. On his return trip he spent a day with Dr. Coon at the Chicago Municipal Sanatorium.

The Theda Clark Hospital of Neenah is being sucd by James Wallace Sr. In this action the plaintiff is suing to recover \$6,500 damages from the hospital, because of the effects following alleged negligence and careless treatment accorded the plaintiff while he was a patient at the institution.

The State Board of Health has sent a poster to every depot and express office in the state, ealling attention to the law forbidding spitting on sidewalks or public places.

Child Welfare Camps in Lapham and Kosciusko Parks, Milwaukce, were elosed on September 1st by the health department, as the funds for maintaining them are exhausted.

Milwaukee had on record at the health department, September 4, 731 cases of whooping cough. Of these cases about 25% are among children of school age over 6, 50% among children of kindergarten age, and 25% of the victims are children under 4.

The Tubereulosis Camp at Tomahawk Lake is open to patients. Only incipient eases will be accepted. Applications of persons who desire to be admitted must be approved by one of the physicians of the State Board of Control. Except for New York, which has a similar institution in the Adirondaeks, no other state has a camp of this character. Light work will be furnished patients without money.

The Social Workers Tuberculosis Sanatorium, Milwaukee. netted a profit of \$2,000. from their tag day, held on September 17th.

Health Commissioner, George C. Ruhland, Milwaukee, announces that the health department has decided to give free medical consultations and advice to the public on venereal diseases. He declares that the city will not furnish treatment, but will make examinations and give necessary advice to applicants. He can be consulted at any time.

Employees of restaurants, hotels and manufactories handling food products at Milwaukee, will be required to pass a physical examination, as is required of such employees in New York. They will be called to the health department office and given both physical and laboratory tests.

Bonds to the amount of \$160,000 will be issued to complete the equipment of Muirdale, Milwaukee County's new tuberculosis Sanatorium. At a meeting of the county board, held on September 22nd, a resolution was adopted to this effect.

The ninth annual meeting of the Minneapolis, St. Paul and Sault Ste. Marie Railway Surgical Association will be held in the Hotel Radisson, Minneapolis, December 7th and 8th, 1915.

#### REMOVALS

Dr. A. A. Beck, Johnson Creek to Caloma.

Dr. W. L. Thompson, Oakfield to Sheboygan.

Dr. R. C. Pfeil, Mattoon to Thiensville.

Dr. C. E. Wintermute, Kilbourn to Saratoga, Cal.

Dr. W. L. Boyden, Green Bay to Seymour.

Dr. Elmer Hoffman, Lone Rock to Belleville.

Dr. G. A. Larson, for the past ten years located at Blanchardville, has removed to Cumberland.

Dr. G. A. Almfelt has removed from Kenosha to the Walters Sanitarium, Walters Park, Pa.

Dr. W. G. Hyde, for the past year ambulance surgeon in the city of Chicago, has located at Racine.

#### **MARRIAGES**

Dr. W. G. Sexton, Marshfield and Miss Ethel H. Morgan, Baltimore, Md., August 25th.

Dr. Forrest II. Frey, Wausau and Miss Gertrude Moran, Kane, Pa., on August 26th.

#### OBITUARIES.

Dr. Frederick P. Leich, Jackson, died on August 21, 1915, aged 75 years. He was a member of

Washington County and the State Medical Society.

Dr. Philander H. Harris, Milwaukee, died on August 23, 1915, following an operation. Dr. Harris was 59 years of age, and had practiced in Milwaukee for more than twenty-five years. He was a graduate of the University of Illinois, College of Medicine in 1887.

Dr. Henry F. Kortebein, Milwaukee, died on September 14, 1915, aged 47 years. He was a graduate of the Northwestern University Medical College in 1892. Member Milwaukee County and the State Medical Societies.

Dr. Edmund F. Woods, Janesville, was drowned on August 19, 1915, by the sinking of the S. S. Arabie. Dr. Woods was 60 years old. He was a graduate of the Medical College of Indiana in 1882. He was district surgeon for the Chicago and Northwestern Railway for twenty years. He was a member of Rock County and the State Medical Societies, Fellow American Medical Association, member of the Association of Railway Surgeons, and a member of the Clinical Congress of Surgeons.

Dr. Frederick C. Gillen, Milwaukee, was aceidentally killed by the explosion of a compound containing potash during experiments to find a process for manufacturing that chemical, on September 3rd, 1915.

Dr. Gillen was born in Grand Haven, Miehigan in 1871, and received his medical education at the Miehigan University in 1892. In 1893 he came to Milwaukee, and had practiced there up to the time of his death. He was a member of Milwaukee County and the State Medical Societies.

Dr. D. R. Freeman, Colby, died on August 26th, 1915, at the Veterans' Home, Waupaea, aged 76 years. Daniel Reed Freeman was born at Parishville, N. Y., March 31, 1840. His boyhood and early manhood were spent on a farm in northern New York. He served throughout the Civil War in Company K, 60th New York Volunteers, and was a member of the White Star Brigade. At the close of the war he took up the study of medicine at the University of Vermont, College of Medicine, Burlington, and graduated in 1873. In 1876 he came west and located at Dorchester, after one year he came to Colby, which had been his home for the greater part ever since. On September 10th he was married to Miss Lenore C. Whitehouse.

#### THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

Officers 1915-1916 L. F. JERMAIN, Milwaukee President

M. R. WILKINSON, Oconomowoc 1st Vice President R. W. BLUMENTHAL, Milwaukce, 3rd Vice President

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4th Dist., W. Cunningham - Platteville

5th Dist., W. F. Zierath - Sheboygan 6th Dist., H. W. Abraham - Appleton TERM EXPIRES 1920 7th Dist., Edward Evans - La Crosse 8th Dist., T. J. Redelings - Marinette

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Committee on Arrangements R. W. BLUMENTHAL, Milwaukee, Chairman

NEXT ANNUAL SESSION, MADISON, OCTOBER, 1916.
The Wisconsin Medical Journal, Official Publication

LIST OF EXECUTIVE	OFFICERS OF COUNTY MEDIC	AL SOCIETIES.
County,	President.	Secretary.
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Barron-Polk-Washburn-Sawyer-BurnettG Brown-KewauneeW	N. Lemmer, Spooner	A. S. White, Rice Lake,
Brown-Kewaunee	'. H. Bartran, Green Bay	H. C. Mix, Green Bay.
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Chippewa	. C. Nussle, Chippewa Falls	A. L. Beier, Chippewa Falls.
Clark	. II. Christofferson, Colby	E. L. Bradbury, Nellisville.
Columbia	. O. Force, Pardeeville	A. F. Schmeling, Columbus.
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DodgeR	E. Bachhuber, Mayville	E. S. Elliott, Fox Lake.
DoorII	. F. Eames, Egg Harbor	T. C. Proctor, Sturgeon Bay.
Douglas	L. Hatch, Superior	D. R. Searle, Superlor.
Dunn-Pepln	. E. Butler. Menomonie	l. V. Grannis, Menomonie.
Eau ClaireF	. S. Cook, Eau Claire	R. E. Mitchell, Eau Claire.
Fond du LacJ.	M Baasen, Mt. Calvary	H. C. Werner, Fond du Lac.
Grant	MaeDonald, Cuba City	M. B. Glasier, Bloomington.
Green	J. B. Gliagi, Monroe	1. A. Moore, Monroe.
Green Lake-Washara-Adams	, E. Baldwin, Green Lake	F. R. Silverthorn, Berlin.
IowaG	. 11. McCallister, Avoca	J. R. Hugnes, Dougeville,
Jeffcrson11	. P. Bowen, Johnson Creck	W. A. Engsberg, Lake Mills.
Juneau	C. Vogel, Elroy	A. T. Gregory, Elroy.
KenoshaJ	. H. Cleary, Kenosha	J. J. McShalle, Kellosha.
La Crosse	C. Hubonthal Polmont	II O Shookley Darlington
Lafayette	V. Watson Antles	T. O. Welght, Antley
Tanglade	O Walch Mounth	Uorbone Namion Monelli
Lincoln	C. Walsh, Mellilli	merbert Saylor, Merrin.
Marathon	W Ionge Wangan	D. M. France, Wantowoo.
Marlnette-Florence	E Artell Marinette	D D Holm Marlnotte
Milwaukee-Ozaukee	C Sayle Milwankee	Donlol Honkinson Milwankee
MonroeL	G Sheurleh Tomah	Spanger D Reehe Sparta
Oconto	B Atwood, Oconto	R C Faulds, Abrams.
Oconto	T. Elllott, Rhinclander	C. A. Richards, Rhinelander,
Outagamie	. 11. Brooks, Appletou	W. N. Moore, Appleton.
Ploros	artlu Oven Ellsworth	R II Calras River Falls
Portage	V. W. Gregory, Stevens Point	W F. Cowan, Stevens Polnt,
Price-TaylorE	A Richy Park Falls	G H McClurc, Westboro.
Raalna	I l'one Racine	Sugan Jones Racine
Richland	F Dougherty, Richland Center	H. C. McCarthy, Richland Center.
Rock	E Loomis Janesville	F E Sutherland, Janesville.
Rusk	ullan C. Baker, Hawkins	L. M. Lundmark, Ladysmith.
SankF	D. Hulburt, Reedsburg	Roger Canoon, Baraboo.
ShawanoC	. E. Stubenvoll, Shawano	II. J. Calkins, Shawano.
SheboyganG	. II. Stannard, Sheboygan	A. J. Knaur, Sheboygan.
St. CrolxP	hillp McKcon, Clear Lake	W. H. Banks, Hudson.
Trempcalcau-Jackson-Buffalo11	. A. Jegi, Galesville	P. Morley Virgons
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Walworth	, 15, Midgley, Whitewater	S. T. Driegol Borton
Washington fl Waukesha F	. Albers, Allelitoli	R Ackley Oconomowoc
Winnehees	unton Clark Ochkoch	H. W MOTPENFOID, USBKOSH,
Wood	ugh E Waters Nekoosa	W. G. Merrill, Grand Rapids.
wood	ugu r. maters, menooda	

#### SOCIETY PROCEEDINGS

#### **GRANT COUNTY**

The Grant County Medical Society held a meeting at the Central House parlors, Boscobel, Tuesday, September 14th. After a bountiful dinner, served at noon, the members present were treated to an excellent address by Dr. Thomas H. Hay, Superintendent of River Pines Tuberculosis Sanatorium at Stevens Point, his subject being Diagnosis and Treatment of Tuberculosis. It was an address replete with practical information and advice. Dr. J. H. Fowler, who was on the program for a paper on Deep Suppurations of the Neck, with Report of an Extraordinary Case, and Dr. J. C. Betz, Report of an Interesting Case, asked that Dr. Hay be allowed to have the time belonging to them, as his subject was so interesting and important. The visiting physicians were guests of the Boscobel doctors during their stay, and all agreed that they had been royally entertained.

The bad condition of the roads prevented many from attending the meeting, who had fully intended to come.

Dr. James Orr of Mt. Hope was made a member of the Society.

M. B. GLASIER, Secretary.

#### JEFFERSON COUNTY

The Jefferson County Medical Society held its outing meeting at Lake Mills on July 1, 1915. The meeting was called to order by the president, Dr. Bowen. Minutes of the last meeting were read and approved. The president, in a short address, encouraged harmony among the members of the profession. Dr. Rock Sleyster, state secretary, followed with a very interesting and instructive paper relating to the General Practitioner and the Public. His subject covered the duties he owes to himself, to his brother practitioner, and to the community in which he lives.

Dr. Dodge, who has practiced at Lake Mills, for fifty-five years, gave a short but interesting sketch of his carly experiences in the practice. Dr. Wilkinson, who always has something interesting, addressed the Society, followed by Dr. Ackley, who also extended an invitation to the Juneau Meeting of the 1st Councilor District, which was held in August. After the meeting a lunch was served at the secretary's residence, Dr. W. A. Engsberg. Present at the meeting were: Drs. Reed, Carmichael, Beck, Smith, Clark, Keithley, Bennett, Leicht, Dennis, Draper, Dodge, Shoekley, Wilkinson, Sleyster and Engsberg.

WM. A. ENGSBERG, M. D., Secretary.

#### OZAUKEE COUNTY.

Ozaukee County Medical Society was organized, after some little preliminary work, on September 21st. The meeting was held in Cedarburg. Seven of the fourteen physicians practicing in the county attended the meeting which surely was an enthusiastic one. The next meeting of the Society will be held at Fredonia, when the members will be entertained at a chicken dinner by

Dr. and Mrs. E. E. Coerper. This meeting is scheduled for the evening of October 22nd.

The following officers were elected: President, Dr. O. J. Hurth, Cedarburg; vice-president, Dr. E. E. Coerper, Fredonia; Secretary-Treasurer, Dr. G. F. Savage, Port Washington; delegate, Dr. C. Balkwell, Grafton; alternate, Dr. H. M. Katz, Cedarburg; Censors, Dr. W. H. Drissen, Port Washington, Dr. A. Mesch, Saukville and Dr. W. F. Seott, Port Washington.

W. J. ZIERATH, Councilor 5th District.

#### WALWORTH COUNTY

The Walworth County Medical Society held its midsummer meeting at Elkhorn on August 26th. A dinner was served at 6:30 P. M. at the Elkhorn House, after which a session was held in the court house. Dr. W. F. Lorenz, director of the newly established Psychiatric Institute at Mendota, addressed the meeting.

#### WAUKESHA COUNTY

Waukesha County Medical Society held its regular monthly meeting at the Eagle Hotel on September 1st. There were nineteen members present from Waukesha, Mukwonago, Oconomowoc, Pewaukee, New Butler, Hartland, Delafield, Merton, Sussex and Menominee Falls. A good supper, as usual, finished the program.

#### WAUPACA COUNTY

A joint meeting of Waupaca and the Ninth Councilor District Medical Societies was held at Castle Hall, Waupaca, July 30, 1915, at 7 P. M., Dr. H. A. Jefferson, presiding. After a sumptuous banquet, tendered by the host, Dr. L. H. Pelton, the following papers were presented: "Positive Therapeutics," Dr. O. M. Layton, Fond du Lac. "Hodgkin's Disease" (illustrated by lantern slides), Dr. J. L. Yates, Milwaukee. The program was well received, and the members enthusiastic. After adding several new members, and electing officers for the ensuing year, for the county society, the latter society adjourned to meet at Iola.

GEO. T. DAWLEY, M. D., Secretary.

#### WINNEBAGO COUNTY

The Winnebago County Medical Society held a business meeting on September 25th, at the office of Drs. Linn and Morgenroth, at which four new members were taken into the Society. They are: Dr. Fred J. Counzelmann of Winnebago, Dr. Frank D. Fluery, Dr. Hugh G. Danforth of Omro, and Dr. Henry Kleinschmidt of Oshkosh. The meeting was held at this time to admit the new members before the meeting of the State Society. About eighteen members attended. Following the business meeting an informal social hour was passed.

#### FIRST COUNCILOR DISTRICT SOCIETY.

The third annual meeting of the 1st Councilor District Society, comprising Dodge, Jefferson, Washington and Waukesha Counties, was held on Wednesday, August 11th, at the Auditorium, Juneau. After the business and literary program, supper was served at the Hotel.

Dr. Wehle, the president, presented a paper on "The Preparation and the Uses of Digitalis." Dr. Daniel Hopkinson, Milwaukee, secretary Milwaukee County Medical Society, read a paper on "False Interpretations of Laboratory Findings".

S. B. Ackley, M. D., Secy.-Treas.

#### SECOND DISTRICT SOCIETY.

The annual meeting of the Second District Medical Society was held at the Pennoyer Sanitarium, Kenosha, on September 8, 1915. H5 physicians, representing the profession in Racine, Kenosha and Walworth Counties attended the meeting. In addition there were a large number of invited guests from Lake County and other surrounding counties in Illinois and Wisconsin. Dr. N. A. Pennoyer was host to the physicians, and one of the features of the meeting was the dinner served during the early part of the afternoon. Dr. G. Windesheim presided at the sessions. Dr. Geo. F. Adams was named secretary in the absence of Dr. J. J. McShane. At the first session, Dr. Nelson M. Percy of Chicago, a leader in the profession in the middle west, delivered an address on "Surgical Treatment of Pernicious Anemia." This lecture was illustrated with lantern slides. Dr. W. F. Lorenz of Madison, superintendent of the Psychopathic Laboratory at the state hospital at Mendota, gave a talk on the manner in which the laboratory might be made of greater value to the physicians of the state. Following the dinner there were toasts, responded to by President Redelings and Treasurer Hall of the State Association. There were the usual number of impromptu speeches, and the later hours of the afternoon were given over to social pleasures. At the concluding business meeting, Racine was selected as the place for holding the 1917 meeting. Dr. J. S. Keech, Racine was named president and Dr. S. Sorensen, Racine, secretary and treasurer of the association.

#### NINTH COUNCILOR DISTRICT.

The autumn meeting of the Ninth Councilor District Medical Society was held at Wausau, Friday, September 24th. The program follows: 4-6 P. M. Clinic on Children's Diseases—St. Mary's Hospital. Dr. Clifford G. Grulce. 7 P. M. Dinner at the Wausau Club. After dinner Dr. H. M. Richter, Chicago, read a paper on Pyelocystitis in Infancy.

#### WISCONSIN WOMEN'S MEDICAL SOCIETY.

At the annual meeting of the Wisconsin Women's Medical Society, held in Milwaukee recently, the following officers were elected for the ensuing year: president, Dr. Mary Piper Houck, La Crosse; vice-president, Dr. Minnie Hopkins, Oconto; secretary, Dr. Ada Chandler, Pardceville; treasurer, Dr. Chaffee Fay, Whitewater. The next annual meeting will be held at La Crosse, and an attempt will be made to get the women physicians of Iowa and Minnesota to meet in conjunction with the Wisconsin women.

#### **ABSTRACTS**

THE GENERAL MEDICAL PRACTITIONER AND HIS DIAGNOSIS OF EARLY PULMONARY TUBERCULOSIS. By Dr. James

S. Ford, Assistant Physician, Gaylord Farm Sanatorium, Wallingford, Connecticut, read by title before the Clinical Section of The National Association for the Study and Prevention of Tuberculosis, Seattle, Wash., June 16th at 9 A. M.

Dr. Ford asked the questions: "Does the general medical practitioner utilize the methods at his disposal for the diagnosing of early pulmonary tuberculosis and if he has made the proper diagnosis, does he correctly advise his patient?"

In answering the question, he gave the results of a study of one thousand histories of tuberculosis patients who had been admitted to the Gaylord Farm Sanatorium, which showed that these 1.000 patients consulted 1,940 physicians, of whom only 133, or 7 per cent., made a physical examination, studied the sputum, and took the temperature of the patient. In addition to these 7 per cent., 197, or 10.2 per cent., made no examination of any kind, while 1085, or 55.1 per cent., made a physical examination only, and 381, or 20 per cent., made a chest and sputum examination, and another group of 114, or 6 per cent., examined the ehest and took temperature. Only 263 of the 1,940 physicians took the temperature of the patients although this may frequently be the only sign present in early pulmonary tuberculosis. In other words, these figures would indicate a great lack of thoroughness in the examination of patients suspected of having tuberculosis.

Dr. Ford came to the conclusion that the general practitioner must be awakened to the part he is to play in the eradication of tuberculosis, and suggested that The National Association for the Study and Prevention of Tuberculosis devise some means to impress upon the medical profession the necessity of utilizing all the means at their disposal for the diagnosing of incipient tuberculosis.

Color Sense and its Disturbances. Oguchi, C., (Archiv. f. Augenh. 77, p. 205). Congenital color blindness is frequent in Japan. Oguchi found 5% in his examinations of the recruits for military service. As Nagel's and Stilling's plates did not suffice for the distinction of color blind from color weak persons. O. devised new plates, which are described in detail, and for which he claims the following advantages: 1. The explanation to the candidates is easier and the examination requires less time. 2. All anomalous trichromates are detected, which is sometimes impossible with Nagel's plates. 3. Two kinds of red-green blindness are distinguished with certainty. Also two kinds of color weakness can be discriminated to a certain extent.

Oguchi constructed also new pseudo-isochromatic plates by means of photographs by which it was possible to give the colors to be compared equal brightness. This is of the greatest importance, as the color blind make their distinction of colors by the difference of brightness. He considers his plates superior to those of Stilling, as they possess all the advantages of these, can be used by analphabetes, and allow one to detect color weakness of minimal degrees.

C. ZIMMERMANN.

CONTRIBUTION TO THE RELATION BETWEEN ACUTE RE-TROBULBAR NEURITIS AND MULTIPLE SCLEROSIS. Tarle, Jacob, (from the eye clinic of Prof. von Schleich in the University of Tübingen, Klin. Mon. f. Aug., 54, p. 412), reports on 29 new cases, observed at the clinic since the publication of Fleischer in Klin. Mon. f. Aug., 46, p. 113. Only acute cases with the typical clinical picture were considered, excluding the not acute cases with more chronic course, deviating from the typical aspect and all due to affections of the orbit and nasal sinuses and intoxications. Two-thirds of the cases were females, more than two-thirds of all, three-fourths of the female, occured at the age between 15 and 30. The average age of men was 29, of women 27. As causes were stated: overexertion, slight febrile diseases, disturbances of the nervous system, loss of blood, acute infectious diseases. In none the affection was distinctly attributed to cold.

The course of the disease in most cases was typical: Vision was suddenly impaired by a more or less dense fog. First a central scotoma for colors, then a relative and later absolute central scotoma for white was found which rapidly spread, leaving remnants of the peripheral visual field or even amaurosis. In 24 cases vision was very much reduced. The amblyopia lasted from a few days to about four weeks, and disappeared in the same way it came. First the peripheral portions of the visual field are restored, then the central scotoma grows smaller, finally more or less marked scotomas, absolute or relative, remain or vision becomes normal. This oecurred in 11 cases, good central vision for white but central disturbances of color perception and paracentral scotoma in 6, moderate central impairment of vision with scotoma in 7 cases. In 5 ambulant patients the final result could not be ascertained.

Other ocular symptoms were: pain in moving the eyes and upon pressure, especially at the beginning; pupillary disorders were frequent, inequality of the pupils occurred in 8.

The affection was bilateral in 4 cases, in I one eye became affected after the other. No palsies were observed, but in some cases the anamnesia printed to their precedence, nystagmus in 2 cases.

The ophthalmoscope revealed different conditions: no changes in the beginning in 4, in most eases from the start various degrees of deviation in color and contours, i. e., inflammatory, in 2 marked swelling of the disc and intense venous congestion. At the final observation pathological conditions invariably were found: different degrees of postneuritic atrophy, partly marked pallor of the temporal half of the disc, from which the cases with restitution of normal vision were not excluded.

F.'s investigations again confirmed the great importance of acute retrobulbar neuritis as valuable early symptom of multiple sclerosis. Not only the observation of the further fate of the patients, affected with retrobulbar neuritis, but the eareful examination by neurologists of these cases at the beginning of the ocular affection proved that more than one-third of them and, if those with probable diagnosis are included, more than half presented simultaneous other neurological symp-

toms, which with the eye disease established the diagnosis of multiple sclerosis.

C. ZIMMERMANN.

On Different Forms of Carcinoma of the Lids. Palich-Szanto. Olga, (from the eye elinic of Prof. E. von Gröss in the University of Budapest. Arch, f. Ang., 79, p. 18), gives a review on the different forms of carcinoma of the lids, their origin from the epidermis or its glands and frequency, with reference to the large essay of Mayeda in 1903, and the views with regard to their genesis, and reports the elinical histories of 12 cases. These were all basal cell carcinoma, from which P. concludes that earcinomas of the lids are predominantly basal cell carcinomas, in which the deepest layer of the epidermis commences to proliferate, distinguished from earcinoma spinocellulare which arises from the spinous cells of the epidermis, according to the elassification by Krompecher, based on the histogenetic principle.

C. ZIMMERMANN.

#### **BOOK REVIEWS**

CANCER: ITS STUDY AND PREVENTION. By Howard Canning Taylor, M. D., Gynecologist to the Roosevelt Hospital, New York; Professor of Clinical Gynecology, Columbia University; Member American Society for the Control of Cancer, etc. 12mo, 330 pages. Cloth, \$2.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The caneer problem is now receiving intensive study from many sources. Renewed interest seems to have been given to the subject in the past few years. The literature has grown to enormous proportions. Laboratory workers, clinicians, surgeons, statisticians, social workers, have all been writing in and out of season.

The fact is that the increase of cancer is not only apparent, but real. As the author of this little book says "No larger problem in public health confronts the medical profession and the laity of the civilized world today than that of cancer."

Dr. Taylor's book is an attempt to put together facts gleaned from all souces in acceptable form. The book of 323 pages is divided into thirteen chapters, and into these chapters the author has condensed much information, particularly valuable to the medical student and interested layman. A great amount of literature has been consulted, and the most widely accepted views are presented as the best conclusions for the time being.

In the chapter on heredity, we miss a resume of the remarkable experiments of Dr. Maude Slye with tumors of mice. Her reports are rather recent, and undoubtedly were not available until after the book was in press.

Altogether, we should like to recommend this little book to the attention of the profession. We believe that it would be a safe volume to place in the hands of an enquiring layman. There is not enough pathology to hurt such a person, and only the briefest outline of symptoms of cancer and sarcoma in the various regions of the body.

It answers many questions put to us constantly by our patients in a very terse and authoritative manner.

The book is well printed and, in spite of its condensed sentences, is fairly easy and interesting reading.

L. M. W.

THE CANCER PROBLEM. By William Seaman Bainbridge, M. D., Macmillan & Co., New York, 1915.

The author of this book has performed a signal service to the determined fight against cancer. In spite of the voluminous literature of all phases of the problem, he has had the courage to attempt the review and condensation of the many features. He has given us not only a book replete with interesting facts, but written in a style which makes the reading of it enjoyable.

In a way, the book is a popular one, that is to say, it could be read with interest and profit by physicians, although written more from the standpoint of the layman.

The subject matter which the author eovers is wide. Beginning with the Ancient History of Cancer, he traces the History of Modern Cancer Research. The chief institutions devoted to the eare of eancer patients and to research work in eancer are briefly described. The General Distribution throughout the Flora and Fauna is described, together with the Geographical and Ethnological Distribution. This is most interesting reading. The Section on Statistical Considerations is most carefully selected. His general conclusions as to the increase of eaneer are that "there has been a great increase in the total number of deaths recorded from eancer, partly duc to improved certification of eauses of death and improved diagnosis, and also because more people nowadays attain to ripe years. This must not be confounded with the question of a relative increase. When the figures are analyzed, it is shown that there has been no relative inerease from some parts of the body, for example, skin, uterns, ovary, liver, but that for other sites, notably stomach and intestines, breast and tongue, there has been a relative increase." (p. 104.)

He discusses Etiology, giving a resumé of all the important theories. A chapter on Histopathology, more in a popular vein but, accompanied by a number of excellent illustrations, gives the essentials.

Two most entertaining sections are on Cancer Research—A Resumé of the World's Work—and the section on "The Investigation of Cancer Cures." His final word is The Outlook in which he briefly sums up what seems to be really known, makes a plea for early diagnosis, and thorough surgical removal, and feels that when all is said we are "traveling hopefully."

This is only a rough sketch of Dr. Bainbridge's book. It should be in the library of everyone, lay or medical, interested in the Caneer Problem. As a reference book for field workers and lecturers, it certainly should be invaluable. For the physician who is called upon to answer the numerous questions put to him, it will be a great help.

A very extensive, but naturally not a comprehensive, bibliography of fifty-two pages is found at the end of the book. The references are divided into sections dealing with separate subjects, and the authors are alphabetically arranged. An author and a general index completes the book.

L. M. W.

CANCER: 1TS CAUSE AND TREATMENT. By L. Duncan Bulkley, A. M., M. D., Senior Physician the New York Skin and Cancer Hospital. Svo., cloth, 224 pages. Price, \$1.50, net, postpaid. Paul B. Hoeber, Medical Publisher, 67-69 East 59th Street, New York.

This small book is a collection of lectures given by the author at the New York Skin and Caneer Hospital, and represents the conclusions of forty years' observation and study of his cases.

He is convinced that cancer patients receive too little medical treatment. He favors removal and other well recognized methods of dealing with cancer, but he insists upon a "perfect vegetarian diet, which excludes even eggs and milk. "The yolk of eggs may sometimes be taken with advantage, and also milk alone and separate, at a body temperature, one hour before eating."

There are six lectures: Nature of Cancer; Frequency and Geographical Distribution of Cancer; Metabolism of Cancer; Relation of Diet to Cancer; Medical Treatment of Cancer; Clinical Considerations and Conclusions.

Whether or not one agrees with the author is immaterial. The book is interesting, because it develops a view-point quite at variance with the generally accepted ideas of cancer therapy.

L. M. W.

STUDENTS' MANUAL OF GYNECOLOGY. By John Osborn Polak, M. Sc., M. D., F. A. C. S., Professor of Obstetries and Gynecology, Long Island College Hospital; Professor of Obstetries in the Dartmouth Medical School; Gynecologist to the Jewish Hospital; Consulting Gynecologist to the Bushwick, Concy Island, Deaconess' and Williamsburg Hospitals, Brooklyn, and the Peoples Hospital, New York; Fellow American Gynecological Society. 12mo, 414 pages, illustrated with 100 engravings and 9 colored plates. Cloth, \$3.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

This manual of Gynceology is illustrated with 100 unusually good engravings and 9 colored plates. For a manual of this nature the book is exceptionally complete. The subject material has not been sacrificed for brevity as is often the ease in such compendiums. The chapter on menstruation contains two folding plates on uterine hemorrhage which graphically set forth the various types of such bleeding. These have been well chosen, and have been of great value to the reviewer as an aid in differential diagnosis of hemorrhage from the utcrus. The illustrations are large and well chosen to show instrumentation in the various operative procedures described in the text. The chapter on displacements of the uterus and their treatments, especially the non-surgical methods or pessary treatments of retroflexion, is very well written and illustrated. This book seems to the reviewer to be the best of its nature that has come to his attention and as such it merits especial consideration, not only as a text for students, but as a complete and accurate guide for the physician practicing gynceology.

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#### ORIGINAL ARTICLES

CHANGING CONCEPTIONS OF CARDIAC DISEASE.\*

BY E. L. TUOHY, B. A., M. D.,

DULUTH, MINN.

Classifications of disease make our knowledge thereof more available. The subdivisions and groupings will be determined greatly, not only by the point of view of the originator but even more particularly by the historical period dominating at that time. This is clearly shown in our classifications of circulatory disturbances. During the period in which pathological anatomy was in the ascendancy, all of the subdivisions of cardiac disease were in terms of heart muscle, heart boundaries, endocardium, diseased valves, insufficiencies and stenoses. A corollary of this form of grouping is seen in the relatively unimportant place given eticlogy.

This we might illustrate by analyzing our conception of a fire in a building. Manifestly, the fire is the agent which destroys whatever combustible material it gains access to; where certain portions would stand the immediate onrush of flames, the walls become charred, and indeed, various degrees of destruction are possible, even where the building is not entirely consumed. It can be foreseen, that the building may be repaired good service, or that later the walls may begin to crack and crumble, in such a mauner that the original fire would be given credit for hastening the ultimate dissolution of the building. The fire itself, however, only operated over a limited period, and while other fires may attack the building, it is clear that each would stand in its own relationship to the building as a whole.

This is the attitude long held toward infections which spent their force on such a vital organ as the heart. The original tonsilitis, or similar infection, later on followed by rheumatism or chorea, and endocarditis, with the resulting crippling of the heart valves, express the sequence of events leading up to certain anatomical states, which have been given such names as: mitral stenosis or insufficiency, aortic insufficiency, cardiae hypertrophy or dilatation. We have been content to think in terms of these anatomical defects, not realizing that the original source of the infection, unlike the fire in a building, is not completely eradicated nor limited to a particular period, but that it acts more or less persistently, or at least intermittently, and focuses our attention upon what we can well afford to consider as a "continuous etiology."

Before entering upon the question of what is meant by this, let it be briefly stated that no form of diagnostic grouping is so definite and satisfactory, as that based upon scientific causation. Tuberculosis, malaria, diphtheria and syphilis—each expresses an entity, typical of and encompassing all of the varied manifestations of each particular infection. Their manner of development and life history, follow the fundamental principles based on the reaction between the infecting agent and the host. This desire to emphasize the etiological relationship in cardiac disease, lead R. C. Cabot,<sup>1</sup> in a paper read before the A. M. A. at Atlantic City, 1914, to divide up a series of some six hundred cases of failing heart, into four classes, as follows:

- 1. The rheumatic (streptococcic).
- 2. Syphilitic.

Read before the Ashland, Bayfield, Iron County Medical Society, Ashland, Wis., May 21, 1915.

<sup>&</sup>lt;sup>1</sup>Journal A. M. A., October 24, 1914. pp. 1461.

<sup>&</sup>lt;sup>2</sup>Journal A. M. A., December 5, 1914. pp. 2026.

<sup>&</sup>lt;sup>2</sup>Journal A. M. A., Setpember 12, 1914. pp. 903.

<sup>&</sup>lt;sup>2</sup>Journal of Infectious Diseases, January, 1914.

<sup>&</sup>lt;sup>3</sup>Hartzell & Henrici, Journal A. M. A., March 27, 1915. pp. 1055.

<sup>&</sup>lt;sup>4</sup>Harvey Lectures. Paul B. Hoeber, Pub., N. Y. 1915.

<sup>&</sup>lt;sup>5</sup>The Archives of Diagnosis. July, 1913.

<sup>&</sup>lt;sup>6</sup>Journal A. M. A. October 24, 1914. pp. 1463.

- 3. Arteriosclerotic.
- 4. Nephritic.

A reference to the original article will show the interesting comparisons which he was able to Especially interesting is the knowledge gained by an analysis of probabilities, dependent upon the age of the individual and the sex. "The typical rheumatic patient was a young girl." "The typical syphilitic heart was found in a middle aged man." Aortic regurgitation, coming on without any rheumatic history and occurring as an isolated lesion, is invariably syphilitic. Cabot's1 differentiation received a good deal of unfavorable comment, but it must be acknowledged that the intention is excellent. His last two groupings are admittedly not etiological, but it is stated that as our knowledge progresses, more definite terms can be chosen, and the whole matter is mentioned here, simply to emphasize the advisability, wherever possible of expressing things in terms of their cause. Certain it is that no form of therapy based on any other conception will avail the clinician much, unless it is in acute conditions, which are essentially self limiting and tending to natural resolution.

It is clearly recognized that a syphilitic toxin does not operate over a limited period of time. Even the so-called, "parasyphilitic" tissue changes have been shown to be only an expression of late syphilis, and the active cause of syphilis has been found in them. While the Spirochetae pallida are found more vigorously in the early stages of the disease, still they are found to some degree in the tissues probably in all syphilitic processes. Even Charcot's joints, long supposed to be purely trophic disturbances, have been mentioned recently as actually harboring the Spirochetac. This is mentioned to emphasize that the virus of syphilis (and this includes the germ itself) operates over a long period of time. This is the reason why so many of those individuals in middle age, with slowly developing signs of myocarditis, do so astonishingly well on anti-specific treatment.

It is only a step further to realize that this continuous feeding of the system with toxin, applies only to a lesser degree to the so-called "rhenmatic" or "streptococcic" group. The role played by the tonsil as a continuous source of streptococci has been given all the importance that it deserves. The brilliant work of Rosenow<sup>2</sup> and his co-workers, of

Chicago, has been so fully exploited in the literature that reference to it is only needless repetition. It has been well said that the size of the tonsil is no particular criterion of its pathology. Small imbedded tonsils can quite as well be active depots of culture media as some of the more striking looking, spongy, but well drained tonsils.

The principle of focal infection applies quite as well, of course, to many other diseases, such as rheumatoid arthritis, nephritis, gastric ulcer, as it does to infections of the heart. The clinician is daily brought face to face with the problem that his full duty is not done the patient with some chronic. static disorder, if he does not fully investigate him from the standpoint of possible focal infection. As a site for these infections, an investigation of the mouth is given the first importance. This includes, of course, a thorough examination of all spaces communicating with the mouth and their accessory cavities and sinuses, the teeth, teeth sockets, the nasal sinuses, the antrum of Highmore, and any other source which shows any signs or suggestions of possible or probable defective drainage. As if this were not confusing enough. we know just as definitely, that this extensive area does not comprise all of the possibilities. We must think of the appendix, the gall bladder, the prostate, and possibly even the gastro intestinal tract itself. The surgeons have repeatedly shown the definite relationship existing between cholecystitis and cardiac conditions.

In daily routine, the problem is somewhat simplified by the fact that the teeth offer by far the most likely source of constant infection. I can draw from a considerable series of my own cases. to show the tremendous improvement in individuals evidencing cardiac impairment, when proper attention had been given their teeth. We are in entire accord with those investigators3 who have shown the great tendency of devitalized teeth to develop abseesses at their roots, so-called "apical abscesses." It will be going too far afield to discuss this most interesting situation, wherein the tooth, becoming in a sense a foreign body, accumulates a pus sac either through an infection which followed down the decayed tooth itself, or, as is more generally stated, by the infection being carried to this position through the blood stream. In any case the X-ray shows us clearly, and admits of positive identification, the tooth and root where these pus accumulations occur, and they offer ideal

sources for the securing of autogenous vaccines. Nothing ean be more striking than the improvement in the entire heart condition after these culture stations have been abolished. A report of a series of these cases would afford little convincing proof. It must be admitted that at the same time that the patient's teeth are taken care of, they are also given instructions and advice as to diet and rest, etc.; but where it can be shown that previously the patient had had treatment in the recognized manner, with the usual rest and medication, with only indifferent results and then the patient promptly picks up and takes on an entirely different attitude after these sources of infection are removed, the experience had to be indulged in to be fully appreciated. This is what is meant when I speak of a continuous etiology. This is the reason why mesaortitis, which is known to be of syphilitic origin, responds so well even in many late cases to a proper anti-specific treatment. The eradication of diseased tonsils or bad teeth with pus foci offer, either with or without the use of autogenous vaccine, therapeutic possibilities well worth trying.

In introducing what I wish to say regarding our very illuminating conceptions of cardiac physiology, I can do no better than to quote verbatim from the recent Harvey lectures, given by Thomas Lewis of London.

"Graphic work has dealt as severe a blow to the prestige of anatomical pathology as any it has received of late years. Not that I desire to deprecate this line of study; but clearly, as our prime business is with the living and not with the defunct organism, so the pathology of the wards must take precedence to that of the dead house. Graphic records are records of function, normal or pervert; it is of pervert function that our patients complain. Graphic work sharpens our perceptions, it provides faets which are intensely satisfactory as a basis for argument. The records are clear messages writ by the hand of disease, permanent and authentic documents which silence dogma."

This series of Harvey lectures<sup>4</sup> give a vivid insight into the further advances which have been made in the past three years. A paper by the writer, entitled "Cardiae Irregularity," gives a brief summary of the working knowledge that had been attained up to that time. Lewis' recent lectures are a striking tribute to his unbounded enthusiasm for his work and his untiring energy. An entirely new attitude is opened up for the clin-

ician through these intensive studies in pure physiology. What the patient who consults us wants to know is not what kind of a heart he has, or how much territory it eovers, but he wishes us to tell him how long it will perform its work, and what we can do to help it in its performance.

Some anatomical classifications, notably, for example, aortic insufficiency, gives us a definite prognostic basis; yet many other cardiac states are noted in which an anatomical diagnosis, without the aid of physiology, is most incomplete. I will illustrate by only a few.

- 1. What about those individuals who apparently have a normal heart and a normal blood pressure, who have, and usually notice themselves, intermittent pulse?
- 2. What about those individuals who have a very apparent anatomical heart lesion, but who scen to be sublimely unconscious of it, and able to live their ordinary lives?
- 3. What about those individuals who suffer occasional attacks of syneope, and who even die in these attacks, and in whom a careful postmortem fails totally to give us any anatomical reasons for their death? This, of course, does not presuppose that we do not give full credit to the pathologist for finding such causes of death in a definite pulmonary embolus, the rupture of a ventricle of the heart, the rupture of an aneurysm into the pericardium, or a sudden, complete plugging of a coronary artery.
- 4. What about those individuals who suddenly develop either a very slow pulse, yet regular, or an extremely rapid one? What is the pathology back of paroxysmal tachycardia or allied disorders?

All of these questions are not answered at the present time, but a study of physiological principles of the most fundamental and simple sorts, with the aid of graphic methods, notably the polygraph and the electrocardiograph, have been the instruments in the hands of such men as Einthoven, Mueller, Kraus, Lewis, Mackenzie, and their confreres, are giving us the answers to some of these questions. Manifestly, I can touch on these differentiations in only the very broadest and most casual manner. The polygraph finds its usefulness in its simplicity, and its ability to portray graphically, the sequence of events in the heart beats. The physiological fact was first pointed out by

Herman that a strip of muscle when it contracts, electrically becomes negative to all other points in that muscle at the particular portion or segment where the contraction began. Therefore the hieroglyphic tracing which you commonly see designated as an electrocardiographic record does not indicate the oscillations of the pulse, but rather the fine deflection of the infinitesimally thin thread, obeying the electrical impulses in this or that direction, as they are communicated by the working heart muscle, while the rest of the muscles of the body are in approximate rest. To the ordinary clinician all of this is altogether too bewildering, and needlessly so. These finer methods of intensive study, have their greatest field of usefulness in their rich discoveries of physiological facts. Once these principles are proven and definitely elucidated they can usually be readily interpreted by less intensive and more practical methods.

The heart, in common with all muscles, possesses physiological faculties of irritability, conductivity and contractility. The heart beat begins in the sino-auricular node. That is because this is the most irritable portion of the heart muscle, which we might look upon from the experimental side as a flat area of muscle. It is ideally situated for its impulses to spread out equally in all directions over the auricle, and institutes contraction of the muscle as a whole. These stimuli are gathered up and carried down into the ventricle, through the auriculo-ventricular bundle (His), and are then spread out over the ventricle. Stated very shortly: we can look then for pathological disturbances in: 1. Irritability. 2. Conductivity. 3. Contractility.

Now, whatever else may happen to the heart, its proper function is going to depend upon its regular co-ordinate action and the state of the heart musele, regardless of the condition of the valves—whether they be too wide or too narrow. Mackenzie's arrangement into six groups of the irregularities commonly seen, went a long way toward unraveling the clinical puzzle.

Group I. Sinus Arhythmias. These were the kind occurring in young, nervous subjects, and typically seen in an acceleration of the heart beat during deep inspiration. This is not an abnormality, and per se is of no consequence. The vagus nerve, notably the left, has much to do with heart rhythm, and this form of irregularity is entirely under vagus control.

Group II. Premature Contraction. the emmonest cause of so-called "intermittent pulse." Listening over the heart, one always gets the first and second sound. Taken by itself, this form of irregularity has little clinical significance. It may point to the excessive use of tobacco or to a neurasthenic. The manner in which these premature contractions occur, determines whether it will be so-called "pulsus bigeminus" or "trigeminus." The patient often speaks of a fluttering or a slight giddiness during the spell. It must be remembered that exercise often dissipates this form of irregularily rather than makes it worse. This is a valuable sign. It may occur with other severe forms of irregularities, or with severe heart disease, but by itself has no particular significance. It is due to the fact that some portion of the auricle other than the sino-auricular node, has a higher degree of irritability, and this is usually the auriculo-ventricular node, just at the junction of auricle and ventricle, where the bundle of His originates. As Lewis puts it, "When the normal pacemaker, the sino-auricular node becomes depressed and in part loses its function of irritability, as, for example, by the process of cooling, the central or auriculo-ventricular node is the first in the race for control of the heart beat, and therefore dominates its movements." If this does happen, the impulse travels both down into the ventricle and up into the auricle, and may institute a simultaneous contraction. These are minor aberrations, which have been noted in many electrocardiograms, and simply illustrate the principles involved.

Group III. We are then ready to discuss the next striking and important group of heart irregularities-Heart-Block. As is well known, this arises through some disturbance in conductivity, which is damaged either by injury or disease, and the co-ordination between auricle and ventricle is disturbed. Experimentally crushing has caused this disturbance, syphilitic disease, enlargement of the vessels, such as naevi. or definite foreign growths. At the same time it does not always require these definite anatomical conditions, but can also be produced by certain toxins in the circulation, such as diphtheria, digitalis notably in excess, or the products of asphyxia. Digitalis has its striking action in all cardiac conditions through its action chiefly on the left vagus, in depressing the faculty of conductivity. This will be more

definitely spoken of under the irregularity known as "auricular fibrillation." When the pulse intermits on account of blocking of the bundle, we hear no first or second sound of the heart on auscultation. It is to be remembered also, that all gradations of heart-block occur; such as those in which the normal interval between the beating of the ventricle and the auricle is more than one-tenth of a second. This is commonly seen in acute infections, notably rheumatism and chorea. heart-block can occur temporarily, and come at intervals. When a complete dissociation does occur, the ventricle will beat by itself about thirty to forty times a minute. Heart-block is a reasonably serious form of irregularity, and calls for close observation, and if it persists after any acute condition subsides that could account for it, the patient's history should be carefully inquired into, and a Wassermann taken.

Group IV. Pulsus Alternans. Of all irregularities this gives the worst prognosis. In the usual pulse tracings it is shown by one curve of normal height, followed definitely and continuously by one of lesser height, and points to a disturbance of contractility and to a badly damaged myocardium. Herrick of Chicago, has recently pointed out a clever way of eliciting information regarding this type of irregularity. He stated that when judging the blood pressure by the ausculatory method, that not all impulses come through under the cuff with the same force and degree. Where these tend to alternate definitely, this is an excellent means of interpreting Pulsus Alternans. It might be said in passing, that this method of ausculatory blood pressure taking, is almost of as great value in auricular fibrillation as it is in any type of irregularity.

Group V. Paroxysmal Tachycardia. Not many of these patients will be seen. I have only encountered it twice, and in each case in the most striking manner. I do not propose to devote very much time to this form of irregularity but will merely state in passing that neither very slow nor very rapid heart beats are compatible with either motion on the part of the patient, or life. The determining factor seems to be a considerable drop in the systolic blood pressure, and a corresponding elevation in the diastolic, and while the mean pressure is maintained for some time, cerebral circulation is greatly interfered with, and syncope arises. Lewis states that from published statistics, and dependent somewhat upon idiosyncrasies, a

stoppage of the ventricles from three to five seconds produces unconsciousness; epilepsy at the end of fifteen or twenty seconds; and a stop from a minute and a half to two minutes is rarely followed by recovery. Extremely rapid action of the heart, especially the ventricle, is very apt to end in what is known as inco-ordinated segmental contractions of the ventricle, which practically amount to fibrillations of this ventricle. Not many definite instances of this clinically are on record, but experimentally it can be produced fairly easily in dogs, and is always fatal.

Group VI. Auricular Fibrillation. Mackenzie showed that in all his cases which showed cardiac irregularity, where there was some obvious cardiac failure, 60 per cent. of the auricles were fibrillating. This shows the extreme importance of this form of irregularity and should lead the clinician to have it in mind constantly. Regarding this astonishingly important complex, the exact cause of the "disturbance of excitability" is not clearly shown. We may, however, put down certain definite principles that are known regarding it.

- 1. The orderly impulses arising from the sinoauricular node are lost or confused in a great series of impulses arising from various parts of the auricle, the sum total of which results in a haphazard series, crowding down through the auriculoventricular bundle, lashing the ventricle on to a series of immature, irregular and incomplete beats.
- 2. This has been produced experimentally by the introduction of certain toxins into the circulation of experimental animals, and also by the faradization of the auricle itself.
- 3. It can be determined clinically, first of all, by realizing its preponderance in cardiac irregularities; and secondly, by noting the absolute lack of spacing in the heart beats. This led to the older classification of so-called "delirium cordis" and a variety of similar needs.
- 4. The auricle ceases to contract as a whole. The result is a filling and distention, exhibiting small, flickering, tremulous movements. There is more or less stagnation of blood continually, and the formation of clots is promoted. It is to be noted that of all the heart lesions which have been studied pathologically, mitral stenosis is the lesion most commonly met. At the same time, many mitral stenosis cases are seen, and, by the way, are best heard, in which this form of irregularity has

not yet occurred. We are ready, then, to realize that after the inauguration of auricular fibrillation and the dilation of the auricle has taken place, the classical diastolic or presystolic murmur and thrill is frequently lost. Contrary to the original conception, the fibrillation is not the result of dilatation but the cause thereof.

5. What is needed, then, is some means of seeuring a more orderly succession of impulses, beginning in the auricle and spreading into the ventricle. Herein is the reason for the reputation which digitalis holds in heart disease. It acts specifically by depressing the conductivity function of the bundle. The ventricle is thereby spared a great many of the haphazard impulses, and digitalis and its various associates and derivatives become the ideal means of securing it. In a measure, this is why some eases of heart disease respond so brilliantly to digitalis-notably those cases of mitral disease—whereas other conditions—as, for example, aortic insufficiency—offer no such therapeutic success, and in fact, the digitalis may prove harmful. It is to be remembered that, in the main, digitalis does not increase blood pressure; that it is frequently used in instances apart from auricular fibrillation, and it certainly does strengthen and slow the heart beat, and in many conditions, even where it does not act as a specific, it improves the cerebral circulation sufficiently to overcome, at times, the perversion due to cerebral anemia or basilar edema. The use of digitalis presents a topic sufficient in itself for an hour's discussion.

We are indebted indeed, to Lewis<sup>4</sup> for pointing ont a new condition only recently spoken of; namely, "auricular flutter." We may speak of this as being a condition of fibrillation, except that the heart beat is regular. Electrocardiographically, it has been shown that so many of these patients with an apparent pulse of 80 or 90, have an auricular beat of twice or three times the number. Frequently, these patients will suddenly jump from a pulse of this fractional number, to that representing the full quota of auricular beats, and the result is usually syncope. These cases are usually experienced, according to Lewis, among the aged, and therapeutically he has found that it is advisable to give these cases ascending doses of digitalis, under observation, when it will be found that they will be turned from this condition of flutter into a true case of fibrillation, and this in

turn, under the cautious administration of digitalis, may even bring them back to a normal rhythm. In some of his cases observed, the condition has developed repeatedly. In general, cases of auricular fibrillation need digitalis more or less continuously. Authorities state that some 10 per cent. of the cases of auricular fibrillation will yield to treatment, and recur.

It is to be hoped, then, by first giving all due attention to the principle of ctiology in heart disease; and secondly, to a proper conception of the physiological principles involved, that we will arrive at more intelligent modes of treatment.

A third principle in the treatment of heart conditions is just as important and can be very briefly referred to. The heart is only one of the important organs of the body. It does its work in correlation with various other physiological systems. It is a safe rule to follow: that if, under reasonable treatment, directed to an incompensating heart, with the usual provisions of rest, the patient still does poorly, we may look for some associated trouble in some other organ. This may be a masked malignancy; the apparent digestive symptoms may be due to a cirrhosis of the liver; the albuminuria may be associated with a true shrinking of the kidney, and not represent a passive congestion.

Stengel's classification of cardiopaths in three groups, with this idea in mind, is very helpful.

- (1). Those primary in the heart. In this group would naturally come those cases of endocarditis arising in early life, which later on, through natural process of the disease, or associated infection, which in my mind is most important, come to a state of incompensation. We may have symptoms involving the general vascular system, and also the kidney, but the primary pathology is in the heart, and treatement directed to the heart is most satisfactory.
- (2) The primarily vascular group. The effect later produced on the heart when it begins to incompensate, are secondary, and the best results in treatment are seen from an interpretation of their vascular symptoms. The urinary output does not usually show the typical increase at night; the albuminuria is not quite so constant: the blood pressure not quite so high nor so persistent.
- (3) The true chronic interstitial nephritis. These represent the late cardiac effects following upon the usual hypertrophy incident and necessary

to the shrinkage of the kidney. The hypertrophy is absolutely necessary in order to give the patient relief, even though it is a necessary evil. Sooner or later this hypertrophied heart will become unstable, the patient will come seeking relief for disturbanees attributable to his heart. This is the group that needs treatment from the standpoint of elimination, with the usual care devoted to their dietary. The eyes are frequently affected and give a valuable means of confirming the diagnosis. As contrasted with Group 2, in which drugs such as diuretin, camphor and caffein are of value, in the true kidney eases more is to be gained by extra elimination, sweats, restriction of fluids, and intensive hygienic measures.

#### CONCLUSIONS.

- I. Heart cases should not be treated on a basis of morphology. We should have in mind the principle of specific causation and search out its source.
- II. The most fundamental physiological principles must furnish us with the guide for the subdivision into more logical groupings.
- III. The heart must be treated with due appreciation of its association with other organs.

## ON SUDDEN CHANGES OF REFRACTION IN DIABETES.\*

BY C. ZIMMERMANN, M. D., F. A. C. S.,

MILWAUKEE.

If a symptom, although rare and not absolutely characteristic, may lead to the diagnosis of an occult disease, it is very valuable and must be given due importance. This applies to the sudden increase and decrease of refraction in diabetes at a presbyopic age, i. e. in the 5th and 6th decades of life.

Let me illustrate this by the following case:

In August, 1913, a man, aged 52 years, was brought to me by his physician, on account of his eyes. The patient stated that he always had very good sight, but that for about a week he could not see well for distance. The ophthalmoscopie exam-

ination revealed normal fundus, but myopia of about -0.50. With -0.50 V was normal. From this sudden development of myopia, I at once suspected diabetes and immediately verified this by making Haynes test, which showed great quantities of sugar in the urine. Specific gravity 1030. Upon questioning the patient he had all characteristic signs of diabetes. For the last week he experienced unusual thirst and voided large quantities of urine. Although still stout, he had lost eonsiderable in weight and felt weak. After being submitted to strict antidiabetic diet, he returned after 12 days, strikingly improved. His vision was now normal, the myopia had disappeared and had been replaced by hypermetropia R+1 L+1.50, ophthalmoscopically. V with +0.75 20/15. He read No. 1 at 14 inches with +1.50, showing that his power of accommodation was not weakened. The urine contained no sugar, and the specific gravity was 1022. Generally he felt very well and had remained so when I saw him last in January, 1914.

Hirselberg (Deutsche Med. Woch., 1887 No. 17, 18, 19, and Centralbl. f. Aug. 1870, p. 7) was the first who described myopia from diabetes. According to him it is due to changes of the crystalline lens: "it is possible, but not necessary that streaks of opacity of the lens are visible with the ophthalmoscope." The myopia which developes suddenly and without opacities of the lens, at a higher age, about 50, is especially suspicious; for the eommon myopia develops in youth, and the beginning of senile eataract may not only give the appearance of myopia, but actually produce it. Hirschberg does not say how this process in the lens takes place. As we know that diabetes may eause cataract, which commences with swelling of the lens, the conclusion seemed near, that it may also, without visible opacities, produce a swelling of the lens and thus myopia.

The explanation has been rendered more difficult, since cases of sudden hypermetropia in diabetes have been observed, and the question has arisen why diabetes produced in one case an increase, in the other a decrease, of refraction. Therefore, it may be interesting to survey the objective changes of the eye which have been found in the fluctuations of refraction in diabetes. Sudden changes of refraction may occur by external influences which tend to increase or decrease the longitudinal axis of the eyeball, for instance

<sup>\*</sup>Read before the Milwaukee Medical Society, October 27th, 1914.

tumors in the anterior part of the orbit, an empyema of the frontal sinus with subsequent myopia, or by retrobulbar tumors with following hypermetropia, aside from traumatism. Here the relaxation of the zonula from hypotony after perforating injuries may be the cause of myopia. These may here be left out of consideration, and the causes must be looked for in the eyeball itself.

Sourdille, (Clin. Opht. No. 10, 1900, Jahresberieht der Ophthalmologie, 31, p. 657), explained the sudden hypermetropia of 2.00 D in an apparently emmetropic man, aged 53, by a shortening of the ocular axis from loss of water, as the intraocular tension was diminshed. By antidiabetic diet the sugar and hypermetropia disap-Horner (Klinische Monatsblätter für Augenheilkunde 1873, p. 488, Jahresber. d. Ophth. 4, p. 488) observed hypermetropia of 1/14 in a woman, aged 55, after she had been suffering from diabetes with enormous loss of water and execretion of abundant quantities of sugar. He believed that changes of refraction, increasing and decreasing with the losses of water, could be eaused only by the diminution of the contents of the eyeball in toto, to which the sclera adapts itself. He also attributed the hypermetropia in retrobulbar tumors not to actual compression of the eyeball, but decrease of its contents in consequence of impeded eirculation. Excessive hypotony was observed by Heine, (31. Bericht der Ophth. Gesellschaft, Heidelberg, 1903, p. 273) in three cases of diabetic coma. The nutrition of the first patient, a girl, aged 25, was very much reduced, but a considerable loss of water of the tissues could not be ascertained. Hertel (Klin. Monatsbl. f. Aug. 51, II, Sept. 1913, p. 351 and von Graefe's Archiv, 88, p. 197) produced this hypotony of the eyes experimentally in rabbits by introducing large quantities of sugar or different salts per os or intravenously, and also in himself and other persons by taking from 20 to 30 grams of salt, and explains it by altered concentration of the blood independent of blood pressure. By the foreign admixtures the blood is stimulated to regain its constancy through dilution and disintegration. The water required for this is drawn by the blood from the tissues, as the diminution of the water contents of the eyes showed, with subsequent decrease of intraocular tension. From the remark of Hertel that no subjective disturbances were experienced we may infer that no changes of refraction were caused. Schieck (Klin. Mon. f. Aug. 45, II, July 1907), on the other hand, observed sudden myopia of —3.5 and —4.00 D. in a man, aged 27, after profuse loss of water from diarrhoea from which he had been suffering for 10 days. Nothing is said of the tension. In the cases of diabetic hypermetropia of Lundsgaard (Kl. M. f. Aug. 48, II, July 1910, p. 43) and Woelfflin, (49 II, October 1911, p. 430) repeated measurements with Schioetz's tonometer revealed no alteration of tension before and after the visual disturbances, and Gallus, (Archiv für Aug., 69, p. 66), found in none of his nine cases of diabetes with diminished refraction a decrease of tension, so that this element may safely be excluded.

If by loss of water in diabetes the *shape* of the eyeball would be changed, this might become evident by alterations of *curvature* of the cornea. The measurements of the cornea with the ophthalmometer before and after the onset of diabetic hypermetropia by Gallus, Lundsgaard and Woelfflin, however, revealed no changes of curvature, so that the hypermetropia could not have been caused by this.

Appenzeller, (C. f. pr. Aug. 1896,), attributed the sudden myopia of 1.00 D in a man, aged 43, which had set in with the symptoms of diabetes two weeks previously, to an increased index of the aqueous from higher concentration. After the disappearance of sugar from the urine by antidiabetic diet, the myopia likewise disappeared. Also Schapringer (New York Medical Journal, October, 1893) explained the transient myopia in iritis and Moauro the transient myopia in icterus by an increase of the index of the aqueous. Moauro (Lavori della Clin. Ocul. di Napoli, III. p. 100) produced this augmentation from 1.388 to 1.356 experimentally in dogs by ligating the bile ducts. Hess, (Klin. Mon. f. Aug. 1898, 36, p. 274, and Graefe-Saemisch, Chapter XII; 3rd edition, p. 397), however, proved that the calculations of Moauro and Schapringer gave too high values of the increase of refraction of the eve by increased index of the aqueous, as they were based on the erroneous supposition that by increased index of the aqueous only the system cornea plus aqueous be altered, while otherwise the refraetion remained the same as in the schematic eye.

By the increased index of the aqueous the difference between this and the index of the lens becomes smaller and thus the refraction by the lens

less, whose focal distances become larger than in the schematic eye. The focal distances of the lens also become unequal, since it is not surrounded by media of equal indices as in the schematic eye. Hence the cardinal points of the eye undergo a displacement which must be calculated by dctermining the chief and focal points of each of the refracting systems and their combinations. Hess showed by these calculations that increase of the index of the aqueous of the normal value of 1.3365 to 1.377 (i. e. the index of the cornea) in an emmetropie eye produces a myopia of only -1.70D. and that it requires an increase to 1.42 for eliciting a myopia of -5.30D. concludes that the transient forms of myopia above mentioned eannot be referred to an increased index of the aqueous. For producing a myopia of from 1.50 to 2.00 D. the index of the aqueous would have to become equal to, or even higher than, the index of the cornea, which in reality is not likely to occur. That especially the increase of the index of the aqueous by augmentation of its contents of sugar in diabetes will not eause a noticeable myopia may be inferred from the following: According to Lohnstein the refraction and index of a 20 per cent. solution of grape sugar would correspond to the index of the cornea. The concentration of the aqueous for producing a myopia of -1.50D in a previously emmetropie eye would thus have to be almost of this amount. Deutschmann, however, showed that a human lens placed into a 5 per cent. solution of grape sugar shrinks and becomes opaque after a few hours. He also determined the amount of sugar of the aqueous in a diabetic girl, whose urine constantly contained more than 8 per cent., and found 0.50 per cent. The slow increase of the index e. g. of a salt solution with waxing concentration was ascertained by Bocrner (1869). 1.342 corresponded to a concentration of 10 per cent., 1.355 to a concentration of 20 per cent., and 1.366 to a concentration of 30 per cent.

These numbers suffice for refuting the assumption of the increased refraction being due to the increased index of the aqueous.

Futhermore in diabetes also the vitreous contains sugar, and an increase of its index must diminish the total refraction of the eye and more or less neutralize the increase of the index of the aqueous. For instance if the index of the vitreous would rise to the same height 1.42 as that of

the aqueous the eye would acquire a hypermetropia of 6.00 D. If in an ieterie person an increase of the index of the vitreous by 0.018 would really occur, as found by Moauro in dogs after ligating the bile ducts, a myopia of scarcely —0.75 would result, even if one would suppose that the index of the vitreous would not be influenced by the icterus which is not very probable. (Hess, Graefe-Saemisch, Chapter XII, 3d edition, p. 398).

Today most authors seek the cause of changes of refraction in diabetes in alterations of the crystalline lens, either of the curvature of its anterior surface or of its refractive index, or both. Van der Brugh, (Nederlandisch Tijdschrift voor Geneeskunde, 1901, II, 249, quoted by Schicck, Klin. Mon. f. Aug., 45, II, Juli, 1907, p. 44), for instance, attributes the diabetic myopia to an increase of the curvature of the lens surfaces by swelling of the cortical substance. Others think of a swelling of the lens by intussusception of water. Hess, however, objects that it is a priori not certain whether such an intussusception of water must necessarily lead to an increase of curvature of the lens in the pupilary area. This depends, among other eircumstances, on the pliability of the eapsule in increased intralental pressure. Nothing definite is known about this, but might be ascertained by measuring the curvature of the lens at the anterior pole (Hess, Graefe-Saemisch, Chapter IX, 3d edition, p. 136). In hypermetropia an elongation of the anterior radius of the lcns would have to be surmised, which so far has not been proven by exact investigations. Others assume, that by the entrance of fluid into the lens the index of the cortex is diminished and consequently the total index of the lens increased. The imbibition of the cortex of the lens with fluid generally leads to opacities of the lens, but must not necessarily, since Salfiner (von Gracfe's Archiv. 59, p. 520) showed that a lens with varying contents of water may remain transparent.

Hess admits that such an imbibition of the lens cortex of a diabetic person with fluid may become stationary for some time and thinks that the investigation of the cortical and nuclear images of the lens may elucidate the condition. If e. g. the anterior cortical image would be unusually faint, with regard to the corresponding age, and the nuclear image very bright, this would be in favor of the above mentioned hypothesis, as it would indicate that the index of the cortex is diminished.

On the other hand, if the anterior nuclear image becomes fainter, in comparison to normal conditions, it would with great probability indicate an increase of the index of the cortex. Consequently the difference between cortex and nucleus and also the total index of the lens would be smaller, with resulting decrease of refraction, viz. hypermetro-This was actually observed by Woelfilin, (Klin. Mon. f. Aug., 49, II, October, 1911, p. 426), in a case of diabetic hypermetropia of 2 D. He found in several examinations the anterior nuclear image decidedly fainter than after subsidence of the hypermetropia, and explained the transient hypermetropia by an increased refraction of the anterior cortex of the lens, caused by pathological changes of the aqueous in consequence of diabetes.

According to the investigations of Pichler (Prager Med. Woch. 1901, p. 225 and 239, quoted by Schieck, p. 44), on the development of diabetic cataract it is preceded by an increase of the volume and swelling of the lens from intussusception of fluid, without an at first noticeable opacity of the lens. Pichler found with the corneal microscope of Zeiss in the very incipiency of diabetic cataract, barely noticeable minute formations, like drops, which soon increased in volume, in all strata of the lens, especially in the posterior cortex. The drops remained perfectly transparent, soon became confluent and forced the lens fibers apart. These observations in vivo were verified by the postmortem examination of a diabetic patient, aged 10, who had a rapidly developed cataract and died after a few weeks. There was a considerable accumulation of fluid under the capsule, so that the lens had approximately the form of a sphere. Capsule, epithelium and fibers were normal, and the fluid contained a few Morgagnian globules. P. ascribed the accumulation of liquid to a deposit of salts in the lens and increase of the osmotic pressure of the capsular sac, the capsule possessing the properties of a semi-permeable membrane. As in some cases of diabetic myopia cataract developed, the invopia may in these be explained by changes of the lens similar to those described by Pichler.

Changes of the volume of the lens, however, may also explain diabetic hypermetropia. Hess, (Graefe-Saemisch, Chapter XII, 3d edition, p. 74), showed that with regard to the influence of the thickness of the lens on the total refractions

literature contains partly erroneous opinions. Mere increase of the thickness of the lens decreases, (not increases, as asserted), its refractive power, as can be mathematically proven in the lens formula, (D<sub>1</sub>+D<sub>11</sub>-SD<sub>1</sub> D<sub>11</sub>), the product S. D. D., becoming greater with growing thickness of the lens. To an increase of 2mm in thickness corresponds a decrease of refraction of 0.2D. The advancing of the anterior surface of the lens increases the total refraction of the eve and may neutralize or overcompensate more or less the decrease, caused by the greater thickness. Machek (Zeitschrift f. Aug. 19, April, 1908, p. 330) reported 3 cases, in which at the very beginning of cataract a decrease of refraction of the lens of from 1 to 2.00 D took place. He explains this by a slower formation of lens fibers in the stage of mortification of the epithelium, with subsequent shrinking of the volume and weight of the lens. as also proved by Priestley Smith. (Trans, of the Ophth. Soc. 1883, III, p. 79). This is most likely associated with a decrease of the curvature of the lens and diminution of refraction of the lens, and consequently of the eve in toto. Paul Knapp. Zeitschr. f. Aug., 21, Mai 1909, p. 420), who reported 2 cases of transient hypermetropia in diabetes, concludes from this observation of Machek that in incipient cataract, aside from the generally known occurrence of increase of refraction, occasionally also a decrease of refraction may take place, that both these changes may also occur in diabetic lenses, perhaps by flattening of the lens from loss of water or simply alteration of its refractive index. His experiments on rabbits, however, which he made diabetic by injections of phloridzin, for ascertaining whether changes of refraction might result, were negative.

The total refractive index of the lens may also be increased by softening and subequent abnormally diminished index of the anterior pole or a very marked sclerosis of the nucleus of the lens or both for which Heine, (von Graefe's Archiv 46, p. 540), furnished an illustrative case with postmortem examination. A diabetic patient, who previously had normal vision, complained of gradual failure of sight. The lens appeared totally opaque on superficial observation as in cataracta nigra. It could be completely transilluminated with the mirror and showed no spokes or opacitics. The ophthalmoscope, scia-cope, and functional examination, revealed irregular astigmatism of the

lens and a myopia of R from 4 to 5, L from 8 to 9 D. The very completely extracted lenses showed a total index of about 1.470 and 1.452, due to excessive sclerosis of the nucleus. The patient died suddenly from embolism of the pulmonary artery. H, measured the ocular axis of one eye and found it not increased, showing that it was a true refractive myopia from increase of the total index of the lens in consequence of sclerosis of the nucleus. H. does not consider the increase of index characteristic of diabetes, since he could prove it in many cases of senile cataract. But the fact that the lens remained transparent for such a long time, in spite of the excessive sclerosis of the nucleus, so that the invopia could be observed repeatedly, seemed to speak for diabetes. Lenses of eyes with typical high myopia do not show an increase of the total index. Kako, (Klin. Mon. f. Aug., 1903, I, p. 358), reported from the clinic of Uhthoff 10 cases of diabetic myopia. In 5 cataract developed, in 2 the myopia was transient, in 3 it seemed to remain. In these latter 5 cases no opacity of the lens was noticeable.

In another case, a man, aged 43, who had diabetes for several years, K. observed a sudden development of hypermetropic astigmatism of the lens of  $\pm 1.50$  against the rule, with perfect transparency of the lens. Similar observations were made by Gallus (l. c.) who found in diabetes a remarkable frequency of inverse astigmatism. Zentmayer (Annals of Ophth. 21), infers from the inverse astigmatism which he observed in a case of diabetes that the affection must be due to changes of the lens.

According to Gallus' experience increase of refraction in diabetes, which occurred with and without, cataract, is more rare than decrease of refraction.

Gallus noticed in 2 cases and Lundsgaard in one case of transient diabetic hypermetropia a narrow anterior chamber, so that one may think of the possibility that an advancement of the lens might have some influence, this being due to a displacement of the whole lens foreward or simply a bulging of its anterior surface which however would increase the total refraction of the eye.

Schmidt-Rimpler (Die Erkrankhungen des Auges im Zusammenhang mit anderen Krankheiten, 1905, p. 389) and Alexander, (Klin. Mon. f. Aug. 41, II, 1903, p. 108), explain the hypermetropia in diabetes by weakness of accommodation, which is

very frequent in diabetes, so that the so far latent hypermetropia becomes manifest. In a man, aged 59, Schmidt-Rimpler (p. 392) observed sudden myopia of 1.00, while ophthalmoscopically he found hypermetropia of 0.50. Hence he ascribes the myopia to an abnormal strain of accommodation.

This was excluded in our case, since the subjectively stated refraction corresponded with the refraction ascertained with the ophthalmoscope. Therefore there was at that age no necessity of excluding the possible abnormal increase of accommodation by atropin, aside from saving the patient this inconvenience and incapacity for work.

The general diabetic symptoms in our case as well as in 9 of acute decrease of refraction, observed by Gallus, were recent, and from the results the *prognosis* of the ocular disturbances and of the disease itself seems to be favorable, although nothing definite is known as to the exact termination of the disease (Gallus p. 70 and 71).

Our case emphatically demonstrates how great a service was rendered to the patient by the diagnosis of his diabetes from the examination of his eyes. Hence the recognition of the ocular affections is of the greatest importance for instituting early treatment and thus making the prognosis better. On the other hand, it follows that the examination of the prine in ocular changes of this character is imperative.

Although, as the foregoing discourse of the subject shows, further careful observations and investigations are required for the elucidation of the essences of the causes of fluctuations of refraction in diabetes, the knowledge of their occurrence is of immense practical value.

## THE DIAGNOSIS AND TREATMENT OF PULMONARY TUBERCULOSIS.

BY N. E. McBEATH, M. D.,

LIVINGSTON, WIS.

Mr. President and Fellow Members of this Society;

The subject I have chosen for today suggested itself from the discussion and interest shown at our last meeting, in the possibility of our county

<sup>\*</sup>Read before the Grant County Mcdical Society, May 13, 1915.

securing a tuberculosis sanitorium. I understand our county board was favorably impressed with the project, and hope this paper will in a measure, help to keep up the interest of this Society in the matter.

As all of you are undoubtedly aware a very large percentage of post-mortems show fibroscs or healed tuberculous lesions in the lungs. I had often seen statements to that effect, but never had it firmly impressed on my mind until about three years ago at a tuberculosis clinic given by Dr. Pottenger of California at our State Sanatorium at Wales. After demonstrations with patients, of his inspection, and palpation method of diagnosis of tuberculous lesions, which were verified with the stethescope by all those present, Dr. Bottenger made the statement that 90 per cent. of all children by the time they reach the age of puberty have passed through a period of tuberculosis, and that 60 per cent. of postmortems show healed lesions. If this is a fact then by far the largest majority of them must go unrecognized. This leads to the realization of the fact that there must be earlier symptoms than we have heretofore recognized. If 60 per cent of all people are thus affected we would not expect the symptoms to be anything unusual or they would have been noticed, so we must look for commonplace symptoms of this stage. If these cases could be recognized and properly treated when treatment is most effective we would have no secondary or advanced stages of tuberculosis.

It is the recognition of these very early symptoms and the treatment of such cases that I wish to impress upon you.

1 do not intend to cover the etiology of this disease, but wish to mention that Hamburger, Roemer, Wolff-Eisner, von Pirquet, and others have shown that nearly all children pass through a tuberculous infection, and that the disease, as manifested in adult life, is, in the majority of cases, a rebuilding of the old fire and not a new infection from without. This ctiological factor should be borne in mind as it makes nearly all persons suspects, regardless of environment or family history. We should watch for early tuberculosis the same as we are always on the lookout for some of the eaprices of syphilis and in most cases keep the object of our search from the knowledge of the patient, as closely as though it were syphilis, as many patients resent the implication

that they have lung trouble, and will not allow an examination.

The elimination of the word consumption from our vocabulary, will facilitate the handling of tuberculous patients, as the term has grown synonomous with death, to most of the laity.

In the preparation of this paper I wrote to a number of the leading specialists of this country treating tuberculosis, asking their personal opinions as to the early symptoms and physical signs and as to their methods of treatment; and submit the following as the opinion of the majority of these men as to early symptoms; malaise, feeling of being run down, slowly developing weakness and prostration in young persons not accounted for by any of the usual causes of such prostration and weakness; neurasthenai, symptoms of nervous exhaustion or nervous instability; indigestion; rapid pulse; catarrh; below normal weight or excessively over weight; pallor or swarthy complexion, frequent and protracted colds; pleurisy; ill defined pains in the chest which persist and recur; and slight rises in temperature especially after moderate exercise.

In regard to physical signs of early pulmonary tuberculosis, the lung changes will not be marked at this stage. Nevertheless a thorough examination should be made in every case. Pottenger has shown that inspection and palpation are more positive than percussion and auscultation, especially to differentiate between active and quiescent lesions. He claims that the spasm of the apical muscles on the affected side, especially the sternocleido-mastoid, scaleni, trapezius, anguli scapuli, and rhomboidci, is a very early sign of an active lesion. spasm is detected by a very light touch, which also reveals the condition of the subcutaneous tissuc, which if atrophied shows an old lesion. The slight lagging of the base or the lagging of one side of the diaphragm seem with the fluoroscope, is also an early sign of an active lesion on the same sidc.

Slight dullness on percussion or altered respiratory sounds do not differentiate between active and healed lesions, but help in forming a general opinion. Most helpful of these altered respiratory sounds are prolonged expiratory moan, crepitation on deep inspiration, bronchophony or tubular breathing, and in further developed eases the moist rales.

The routine practice of miscroscopical examination of sputum should soon become obsolete, as the diagnosis in all cases should be made before the bacilli are to be found. The quantitative test for albumin in the sputum as made by Holm and Himmelberger is a simple procedure, and shows whether the sputum is of tuberculous origin or not.

As a last resort in the diagnosis we now have the tuberculin test. This is still used by many according to the von Pirquet method of scarification; by others as a subcutaneous injection, and by others as Jeanneret, the intradermal method; which as he claims has the advantage of producing only a local reaction. The method used is not of as great moment as the technic used in any method. It might be well, in connection with a reaction producing elevation of temperature, to mention here, that the temperature curve of tuberculosis is not a regular one, but up every day for a few days and then normal a few days. The reaction to any tuberculin test should be watched closely as the time of maximum reaction is another coroborative guide as to whether a lesion is active or quiescent, 24 hours being the average time for the maximum reaction in an active focus and the degree of quiescence being estimated by the time of maximum reaction after that. In the subcutaneous method considerable care must be taken not to give too large a dose, producing marked focal reaction, or to draw conclusions too hastily from a very small dose, as a larger one may show a quiescent lesion.

We now have three distinct methods for our diagnosis; first the clinical history, composed of the associated symptoms as mentioned above; second, the physical examination and laboratory findings, and third, the tuberculin reaction. The diagnosis should not be made on any one method alone, but after careful consideration of all three.

While the treatment of pulmonary tuberculosis undoubtedly is best conducted in sanatoriums, still if half the incipient cases at large were diagnosed, the physicians of this country to say nothing of the sanatoriums would have all they could do; therefore it behooves every physician to keep well posted on the treatment.

As to the general treatment, that is fresh air, exercise, habits etc., there seems to be little difference of opinion; but as to the specific or tuberlin treatment there is quite a diversity of opinion.

Tuberculin treatment, like all great movements

in history, more especially great therapeutic measures, swung like a pendulum at first to the one extreme of irrational use, then back to the other extreme of skepticism, and has finally settled down to the happy medium of common sense. We know that tuberculin will not fill the cavity in a man's lungs, but we do know that its rational use is one of the greatest aids in the treatment of tuberculosis.

While a great many may be disappointed in the use of tuberculin, they ought to improve their technic instead of blaming the therapeutic agent. The very fact that men like Trudeau, Pottenger, Von Ruck, Sahli, Neusser, Fränkl, Turban, Moeller and the Spenglers have secured results from its use, over a long period of time, proves that its use is beneficial if properly administered.

The theory of the action of tuberculin as given by Wolff-Eisner is that on entering the system it is broken up by specific lysins into highly toxic substances, which toxins are in turn destroyed by specific antitoxins. Thus the tuberculin stimulates the body cells to the production of lysins and the toxins set free stimulate the production of antitoxins or immune bodies. Besides the production of immune bodies, the tuberculin, in proper doses, stimulates a focal reaction or hyperaemia at the seat of the lesion. This is accounted for by the toxins which do not unite with antitoxins in the blood and thus reach the seat of infection, where immune bodies are present in larger numbers than elsewhere, and their uniting with each other at the seat of infection causes the focal hyperaemia or reaction. This contuned hyperaemia or focal reaction is what brings about the healing of the lesion.

It will thus be seen that the dosage and interval between doses must be such as will keep the immune bodies in the blood satisfied and leave enough to stimulate a focal hyperaemia, without being large enough to produce too great a congestion focally.

There are wide variations in the dosage suggested by different men. Head starts with 1/100000 mg. runs up slowly to 1/10000 mg. and continues at this dose. Pottenger starts with 1/100000 mg. runs up rapidly, that is each dose ten times larger than the last one, up to 1 mg. Then he uses 1, 2, 3, 4, and 5 mg. doses. The interval given by Head is one week, while Pottenger uses the smaller doses every other day, and

the larger doses at three or four day intervals. Of course these are general rules and all agree that every case is a law unto itself and must be treated accordingly. It seems logical to me that if the larger doses at short intervals can be used without producing too much focal reaction the results ought to be in proportion. Von Ruck states that the majority of practitioners are using too small doses.

Another point of difference in treatment is in regard to using tubereulin when a patient is running a temperature. The general opinion is that tubereulin should not be administered when the temperature runs over 100°. Pottenger claims that during fever a patient needs immune bodies more than at any other time. He has shown that natural tubereulin is not formed in the system in excess during fever, as is commonly supposed, by observation of the action of tuberculous uleers during fever. While the administration of tuberculin during fever is more difficult, the results are very satisfactory.

As a general rule it may be stated that the results obtained in treatment, other things being equal, will be inversely proportionate to the stage of the disease, when treatment was started.

Dr. Karl von Ruck is working on a prophylaetic vaccine, one or two injections of which, in a person not already infected, will produce a lasting immunity. He has proved that the immunity lasts a number of years, but is not quite ready as yet to give the product to the profession. With the aid of such a vaccine tuberculosis will soon be placed on a plane with smallpox, and other preventable diseases.

In conclusion I wish to emphasize the following points:

1st. The necessity of an everlasting watch for the earliest symptoms of tuberculosis.

2nd. The employment of all methods at your disposal, including the tuberculin test, for the diagnosis of incipient eases.

3rd. The rational use of tuberculin in treating eases until they can be taken into a sanatorium.

#### CASE REPORTS.

. Case 1. Mr. B., age 40, family history negative, personal history negative, except formerly employed at outdoor work, and for last three years indoor work.

Dec. 20, 1912. Called at office complaining of stomach trouble. Physical examination: weight 110 lbs., height 5 ft. 7 in., temp. 99, pulse 88, chest; apices poorly developed, shoulders drooping, slight expiratory moan over both apices. Positive reaction from subcutaneous injection of 1/100 mg. old tuberculin. Advised sanatorium or tuberculin treatment but did not return. About a year later returned and said he had consulted several physicians, but that his stomach only improved while taking medicine. Advised same as first time and patient did not return until Nov., 1914. At this time had night sweats, marked weakness, temperature 100°, pulse 100, moist rales in both apices and reaction to tuberculin positive. Still would not believe himself tuberculous.

Feb. 2, 1915. Returned complaining of ear discharge which had lasted for three months, could scarcely talk out loud. Diagnosed as tuberculous laryngitis and otitis media. Patient insisted on consulting Drs. Mayo at Rochester, so was given letter and returned with diagnosis of eavity in each lung, tuberculous laryngitis and otitis, and advised to go West. Patient thinks too late for treatment now and is gradually losing weight and strength.

Case 2. Miss W., age 17, family history negative, personal history negative. Complaint: has not menstruated as yet. Physical examination; weight 88, hemaglobin 75%, pulse 100, temperature 100°.6; moist rales in both apices, more marked in right. Tuberculin test positive, diagnosis incipient pulmonary tuberculosis.

Sept. 6, 1913, tuberculin treatment started and continued until Jan. 3, 1914. Weight Sept. 6, 88; Sept. 29, 96½; Oct. 10, 97½; Dec. 5, 105½; Dec. 30, 110. Treatment discontinued from Jan. 3 to May 1st, during which period weight gradually fell off to 105 lbs. Treatment started again May 1st and continued until Nov. 28. June 30th, patient menstruated for first time. July 28th; examination shows no rales in right apex and few in left; Sept. 15th results of examination same. Nov. 21st. left apex clear also, weight 112 lbs. and patient menstruated every two months. Patient asked to report weight every month.

Case 3. Miss A, age 24, June 27th, 1914, called to see patient, confined to bed by pain in right limb. Diagnosed as neuritis and treated for same with poor results. July 20th, noticed a small white swelling on hip and got positive reaction to second tuberculin test of 1/10 mg. Lungs were negative at this time. Applied hip cast and started tuberculin treatment July 24th, and continued until Dec. 5th. On Oct. 5th found moist rales in right lung. Admitted to Wales sanatorium Dec. 16. Returned home Jan. 15th and died Jan. 20th.

Case 4. Mrs. G., age 23, Dec. 27th, 1913, patient complained of indefinite stomach trouble and palpitation of the heart. Diagnosed as neurasthenia and treated for same. Feb. 24th, 1914, patient returned, complaining of pain in left shoulder. Diagnosed as rheumatism and treated for same. May 20th patient returned complaining of some indefinite stomach trouble. Patient would

come in about once a month saying she was better for a time but the stomach trouble and palpitation of the heart would come back. On Nov. 21st made first examination of lungs and found expiratory moan over left apex. Second tuberculin test of 1/100 mg. positive. Weight four years ago 143 lbs., one and one-half years ago 120 lbs., today 128 lbs. Diagnosed as incipient tuberculosis and treatment started Nov. 28th. Treatment continued until April 12, 1915. Stomach trouble, palpitation of the heart and rheumatism have all disappeared and patient weighs 139 lbs. Examination of lungs negative but patient asked to return in six months.

Case 5. Miss F., age 37: Feb. 15th, 1915. Woman of very frail build, sallow complexion, complains of feeling tired and very nervous. Would not submit to examination. Has cough and indefinite pains in chest. Family history negative. Given sub-cutaneous tuberculin test and reaction very positive. Weight when tuberculin treatment started Feb. 15, 1915, was 121 lbs. April 24th weight 126 lbs., nervousness and tired feeling disappearing. Marked difference in mental condition of patient. Still under treatment.

Case 6. Miss M., age 24, family history: mother died at 42, tuberculosis. One uncle probably died of tuberculosis. Personal history: pneumonia at 2 years, throat trouble until 13 years, weight at 15 years, 136 lbs., at present 108 lbs. Lost 51 lbs. in last year. Complains of feeling tired for last two or three years.

Physical examination: Hemaglobin 80%, temperature 99.4°, pulse 90, sallow complexion, dullness over both apices anterior and posterior. Muscular rigidity more marked on right. Crepitant rales right apex anteriorly. Moist rales both apices anterior and posterior. Positive reaction to 1/100 mg. tuberculin. Diagnosis, moderately advanced pulmonary tuberculosis. Under treatment at present.

#### PUERPERAL SEPSIS.

THE OPUS MAJOR OF OBSTETRICS.
BY G. A. CARHART, M. D.,

#### MILWAUKEE.

When we stop to consider that nearly one-half<sup>1</sup> of all the deaths connected with child bearing are due to puerperal sepsis, it requires but little argument to prove that this is the opus major of obstetrics, and furthermore, that it is the one subject with which the general practitioner, for it is he who is doing the bulk of the work, should thoroughly familiarize himself.

From the year 1843, when Oliver Wendell Holmes published his paper on the contagiousness of puerperal infections down to 1913 when the medical profession received the report<sup>2</sup> of three well known obstetricians on this subject, there has been a steady advance on the favorable side of the mortality table.

In pursuing the literature on this subject one finds that the ultimate solution of many of the perplexing problems of this condition lies in distinguishing between benign and virulent bacteria living in the genitalia. This point can readily be relegated to future work. Of more importance at the present time, is that the medical profession shall present one solid phalanx in the recognition and treatment of this dreaded situation, as approved and accepted by men of great experience. To have ones own ideas on any medical subjects, when those ideas are clearly proven to be wrong by the practical experience of the majority, is a decided hindrance to any one of us.

From my experience this is the one subject where one so frequently hears "I do not believe in that form of treatment", or "I believe in an early and vigorous curettage" used as the only defense for what might generally be considered bad therapeutics. There are very few of us in this audience whose opinions on this subject, as taught to us in medical college, have not undergone radical changes since that time. So it is our duty to look upon the rapidly changing picture more as students than as practitioners of medicine.

The varieties, whether sapraemie, septicaemic or pyemic, and likewise, much of the pathology are interesting subjects more from the scientific standpoint than from the standpoint of practical value.

The infection is generally mixed, and when we consider that the lochia of many normal cases shows pathogenic bacteria, we realize the uncertainty of pieking out the offending strain in any particular case. Likewise, blood cultures at the present time are usually more hopeful before the culture is taken than when the report is received from the pathologist. A leucocyte count is of value in certain cases. A low count with a high temperature indicates a low resistance, or a virulent infection, or both. A continuous diminution of leucocytes usually indicates recovery.

As soon as a temperature develops the condition becomes a systemic rather than a local phe-

McGlinn. Puerperal Sepsis. Amer. Journ. Obstet.— 1914.

Report of the Committee on Treat. of Puerperal Fevers.—J. A. M. A. Oct. 25, 1913.

nomena, and the pathology of any general infection is the pathology of puerperal infection, therefore, per se it is as Watson states of secondary importance.

The treatment may truly be said to begin before the disease develops, namely, in the line of prophylaxis. I hardly consider it necessary here to disease the technique, and the limiting of vaginal examinations, the value of reetal examinations, and also the training of the nurse into whose hands you entrust your patient after the immediate delivery. The eareful examination of the placenta, and the immediate repair of perineal lacerations are light houses which steer us away from future uncertainties.

Where the condition of puerperal sepsis has developed the treatment may be divided into local and general. The latter is certainly assuming relatively much greater importance, while much of the local treatment is productive of much harm, and is of little benefit.

The scope of the general treatment lies in increasing the physiological resistance to a point where the patient acquires an immunity against the infection.

A suitable room should be chosen, where the patient may have plenty of fresh air and sun light. The outdoor treatment, as in tuberculosis, is a valuable adjunct. Well prepared and nourishing food should be given at regular intervals with two to two and one-half quarts of liquid daily. If this quantity cannot readily be taken by mouth enteroclysis should be employed. Active elimination through the bowels, kidneys and skin diminish the toxic effects of the infection. Six to eight hours of sleep should be obtained daily even if the use of anodynes or hypnotics are necessary. Fowler's position for a certain number of hours each day will tend to promote drainage.

In dealing with local conditions it is well to remember that a tissue which is undergoing involution has a decided diminished resistance to surgical interference. What may apply to a case of septic abortion at three months does not equally apply to a septic condition at full term.

In the report of the Committee on treatment of purperal infection (J. A. M. A. Oct. 25, 1913) the first three questions submitted referred to the question of mechanically emptying an infected uterus containing ovular remnants. From the majority of the reports we may judge that it is

safe to invade the infected uterus with the finger and a light curett. Watson and others, on the other hand, argue that a gauze pack in the lower segment of the uterus, and in the vagina accomplishes the same results as the foreible emptying, and is not fraught with some of its dangers. The finger or the eurett may dislodge septie thrombi, produce raw surfaces, and disseminate infection, and thus throw into the system a large amount of bacteria and toxins. It is in these cases that we are usually unable to distinguish between the saprophytic and the pathogenic infection, and only become aware that we are dealing with a severe pathogenie infection when we discover that the patient is not standing the inoculation with autogenous vaccines which the curettage has produced. If the cervix and lower uterine eavity have been packed, it may be safely left in place for twentyfour to forty-eight hours. At the end of that time it may be repacked if there is not sufficient dilatation. Usually the gauze and uterine eontents will be spontaneously expelled. The result of the retention of some of the secundines has been very much exaggerated. Our efforts at manual extraetion, after the cervix has been dilated should be confined to very gentle manipulations with the finger or large placenta forceps.

The use of intra-uterine or vaginal douches is generally conceded to be a thing of the past. Vaginal discharges may be wiped from the perineum with sterile gauze. Whether we adopt one method or the other, after the uterus has once been emptied, it must not again be invaded.

Where hemorrhage is to be dealt with a gauze pack will usually control the same quite satisfactorily, and likewise stimulate uterine contractions with the resultant expulsion of any retained secundines. Where the infection has spread into the veins in the broad ligament or into the fallopian tubes the expectant treatment is certainly the one of choice. Any form of operative interference during the acute stage usually results disastrously. In the puerperal state many of these exudates will disappear by absorption. Where a secondary infection takes place, and an abscess forms, incision and drainage is indicated.

Sever pain is an indication of peritoneal involvement. It is usually very difficult to determine definitely the presence of free pus in the abdominal eavity. These cases may be classified as belonging to the malignant type. Drainage through the cul de sac, and digital exploration, furnishes drainage, and enables us more accurately to determine the exact pelvic condition. This work should be done under nitro-oxide anaesthesia, and as quickly as possible with the idea of causing the minimum of shock.

#### IN CONCLUSION.

Radical procedures do not tend to shorten the disease. Time must elapse for an immunity to develop—how long depending upon the variety of the infection, the virulence of the variety, and the resistance of the patient. The systemic treatment is of paramount importance. Much of the local interference is more dangerous than the disease. Whatever local treatment is used, must be undertaken with the understanding that nature is endeavoring to establish a barrier which we must not disturb.

# COMMENTS ON RECENT MEDICAL LEGISLATION.\* BY PHILIP F. ROGERS, M. D., MILWAUKEE.

A good many enactments of more or less coneern to the medical profession of the state were made by our Legislature during its last session, but this paper will be limited to a eonsideration of only three, the Medical Practice Act, the Eugenic Law, and the Anti-feesplitting law, and it is intended rather to stimulate interest, discussion and expression of opinion, than to make anything like a clear exposition.

If the laws of our state, regulating the practice of medicine, are unsatisfactory and open to much eriticism—and I admit that they are—the sooner the profession itself and every member of it wakes up and shows an active interest in the subject, the sooner will they be improved.

It is all very well for the society to appoint a legislative committee, and then leave it to them to formulate and promote good legislation, and to watch out for and try to defeat bad measures, but unless that committee has the assistance and advice, as well as the moral backing of the individual members of the society, it will be a long while before anything ideal can be accomplished.

First. A brief analysis of the Medical Practice Aet.

After the passage of this Aet, all those desiring to engage in the practice of Medicine, Surgery, Osteopthy, Midwifery, or Nursing, (except persons now having a lieense or certificate of registration so to practice) must apply to the State Board of Medical Examiners.

- 1. All must submit evidence of a preliminary education, the equivalent of graduation from an accredited high school of the State of Wisconsin.
- 2. After January 1st, 1919, those applying for license to practice medicine and surgery must have had two years college work in physics, chemistry, biology, and either German or French—the equivalent of the two years premedical course at the University of Wisconsin.
- 3. All except midwives and nurses shall take the *same* examination of the Board in anatomy, physiology, general diagnosis, pathology, histology, chemistry, hygiene and sanitation, a provision, it seems to me, well calculated to improve the standards of preparation among those of our brethren who wish themselves to be known as Osteopaths.
- 4. Those desiring to practice medicine, surgery, and osteopathy must show a diploma from a reputable school or college of Medicine and Surgery or of Osteopathy and Surgery, and take an examination in the various branches of medicine and surgery or of osteopathy and surgery, usually taught in such reputable schools.

Reputability is defined as the requiring of a high school preliminary education and the giving of a course of instruction of four years of eight months each.

- 5. Osteopaths licensed prior to January 1st, 1916, may be licensed to practice surgery if they ean pass the regular examination of the Board in surgery and present evidence of having had an adequate course in surgery at a reputable school or college of osteopathy and surgery, requiring not less than twenty months actual attendance.
- 6. Midwives must (a) show a diploma from a reputable college or school of midwifery (To be reputable such school must be connected with a reputable hospital or sanitarium, which gives a course of at least twelve months in the science and practice of midwifery, and includes practical experience in the handling of at least 20 eases):
  - (b) Pass a written examination in the anatomy

<sup>\*</sup>Read at the 69th Annual Meeting of the Wisconsin State Medical Society, Milwaukee, Oct. 6-8, 1915.

and physiology of the pelvis and pelvic organs; the symptoms, physiology, diagnosis and complications of pregnancy; diagnosis, course and management of labor; and the care of mother and child during puerperium.

- 7. Nurses desiring to be known as "Registered Nurses" and to append the letters "R. N." after their names, must: (a) Show a diploma from a reputable training school, i. e. one connected with a general hospital and giving adequate systematic instruction, both theoretical and practical for a course of three or more years (such instruction is specified and is quite comprehensive): (b) must pass a written examination adequate to test the knowledge and experience of the applicant.
- 8. Those practicing massage and hydrotherapy at the time of the passage of this Act may obtain a certificate of registration by furnishing attested evidence of good moral and professional character, such evidence to be given by three physicians or osteopaths. After the passage of this Act, those desiring to practice massage and hydrotherapy must:
- (a) Have had preliminary education equal to graduation from an accredited high school of Wisconsin.
- (b) Present evidence of having had in a scientific or professional school or college an adequate course in physiology, anatomy, and hygiene, and take a written examination in those subjects, (the same examination as that given to physicians and osteopaths):
- (c) Pass an examination in the theory and practice of massage and hydrotherapy.
- 9. "Reputable Practioners" of "Chiropractic" may continue to practice, provided they do not claim to be registered or licensed, and they must display in their offices in large and legible signs, reading: "Not Licensed or registered in Wisconsin,"
- 10. Itinerants must have an annual license in addition to the other requirements, the annual fee to be \$250.00.

Those are considered itinerants who go from place to place more frequently than once a week.

11. Unlicensed or unregistered practitioners of all kinds are not exempt from malpractice actions,

cannot collect fees through legal process, and eannot testify in court in a professional capacity.

12. The provisions of this Act do not apply to the practice of so called Christian Science or to any other form of mental or spiritual therapeutics.

These, in brief, are the important features of the Act, and there is just one point on which I want to add a word of comment, viz: concerning the practice of surgery by so-called osteopaths. First, I believe few, if any, now practicing osteopathy will take advantage of the provision permitting them to try to qualify as surgeons, and if they did so qualify, that few if any of them could persuade anyone to submit to a serious surgical operation at their hands.

Second—After January 1st, 1919, anyone desiring to practice surgery must have had the two years preliminary college work, and a man who lays such a good foundation as that for his life work is not going to take up Osteopathy, but will go to a regular school of Medicine and Surgery.

As originally agreed upon by the Society's legislative committee and the attorney for the State Board of Medical Examiners (who had the framing of the bill in charge) the preliminary two years college work requirement was to have applied to Osteopaths, as well as to physicians after January 1st, 1919, and how it came to be omitted in their case is known only to said attorney. The word "surgery" is safeguarded, however, and to the practice of this branch of the art, the requirement certainly applies.

The so-called Eugenie Law of 1913 received attention by your committee, and discussion as to whether we should work for the repeal or amendment was decided in favor of the latter. There is no doubt that some laws, while difficult of enforcement or defective in the direct fulfillment of their purpose, are nevertheless valuable as educative measures. Witness the anti-spitting ordinances in our large cities, which, by widespread placarding of public buildings and conveyances, call attention to the fact that consumption is spread through sputum. It is certain that the nasty habit of spitting on sidewalks, in ears, and in hallways has greatly decreased since such legislation was enacted, not so much because of threatened penalties for violation, but because of the dissemination of knowledge as to the danger involved in the practice.

Similarly, the knowledge which is already pretty widespread in Wisconsin, that before he can obtain a marriage license, every man must first submit to an examination for venereal disease, calls attention to the dangers of those diseases, with the result that undoubtedly more young men will try to keep themselves free from them, or, if they have already acquired them, will be more faithful in their endeavors to get completely cured. And not only this, but the parents and the young women themselves, who contemplate matrimony will be on their guard, being aware of possible danger, and will more and more demand of prospective husbands, not merely a physician's certificate, but a clean bill of *character*.

Every means of education to this end is a body blow to the double standard of morality which has so long cursed society.

The chief defect of the 1913 law was in the form of the certificate which the examining physician had to fill out, and which caused him to state that he had applied in his examination of the applicant all the higher clinical and laboratory tests of-I hate to say it-Scientific Search. Inasmuch as few men are equipped for doing Wassermann tests, the signing of such a form was in most instances certifying to something which was not true, and many physicians refused to make such examinations. The county clerks had no discretion in the matter, and could not accept any modified form of certificate, consequently a deadlock would have resulted, and no marriages would have been performed in Wisconsin these past two years, had not some of the brethren been able to swallow their scruples and sign up.

Among a half dozen other bills on this subject, one was drawn and submitted by your committee which avoided this difficulty by modifying the form of certificate so as to permit one to state simply that he had made a thorough examination, by the application of the usual and ordinary methods, and that he believed the applicant to be free of venereal disease; also the bill included the examination of women as well as of men, also examination for active tuberculosis, and also it consigned to the rubbish pile those odious words "Scientific Search."

This perfectly good bill, with its additional provisions, got lost somehow in the legislative shuffle, and the old law was so amended as to let a self-respecting man out with a simple statement

that he has made a thorough examination and believes the applicant free from venereal disease. (We must continue to stand for the *Scientific* Search, however, as it still appears in subsection 1 of Section 2 of the Amended Law.)

Possibly, the time is not yet ripe for insisting on the examination of both sexes, though, goodness knows, it is no more than justice, to say nothing of common sense, nor on the equally wise provision regarding tuberculosis. Public sentiment may gradually be educated up to them, however, so that they will come later.

The higher tests may be insisted upon, if the examining physician deems them necessary, and upon request and the forwarding of materials, examination of smears for gonorrhea will be made by the State Laboratory of Hygiene at Madison, and Wassermann tests will be made by the Psychiatric Institute at Mendota free of charge.

Subsection 2 provides that county or asylum physicians of any county shall make the examination and issue the certificate without charge to applicant if he be indigent (or insane?).

The fee has been cut from \$3.00 to \$2.00, and is to be paid by the applicant before the certificate is granted. (A wise provision, but what happens if the examination shows that no certificate can be issued?)

Personally, I regard the anti-fee splitting law as another educative enactment, for it calls the attention of the profession to the fact that this practice has grown into an intolerable abuse, which ought to be abated. Fee splitting or rebating, I has existed ever since men began to exchange commodities, and has ways depended on the ability and willingness of the man who had something to sell to charge enough more for his wares so as to enable him to hand back to the fellow who brought him a customer a part of his profit. Whatever we may think of the rightness of the practice in the abstract, it has worked out badly for some, and often for all of those concerned in the transactions, resulting in overcharging and unfair competition, and, in the case of surgical work, particularly, an inferior grade of goods, careless and sloppy work. Railroad rebating, which formerly enabled so many of our present giant corporations to get a strangle hold on competitors and put them out of business, thus growing fat themselves, was only in recent years recognized as unfair and therefore immoral,

and was stopped by legislative enactments by congress.

And now, at last, in Wisconsin at least, rebating or fee-splitting in the medical profession has been found to be pernicious in its effects, not only on the patients themselves, but on the men who practice it, and unfair to those who do not practice it. It is therefore forbidden, and penaltics are provided for violation of the statute. The recent enactment is in the nature of an amendment to the law of two years ago, and stipulates that the man who receives the rebate is just as culpable as he who gives it, and is liable to exactly the same penalties, viz: a fine of not over \$100.00, or imprisonment for not to exceed six months, and annulment of license to practice.

Also, in order to double lock the doors against this practice and prevent all possibility of getting around the law by subterfuge, a new section is created, which provides that "any physician, surgeon, assistant, anaesthetist, or nurse having given any professional service to a patient, shall render his or her own individual statement therefor directly to the patient."

The same penalties are provided for violation of this section.

The intent of this act is perfectly obvious, viz: to stop the buying and selling of patients by surgeons and specialists, and the degrading "bidding" for cases which is the inevitable consequence and which puts the man who practices it in the same class with the disreputable proprietors of drug cure institutions, who send their letters broadcast, openly offering stated sums for every ease sent to them.

I do not believe it was intended to apply or should apply to the helping out by one physician of another during his illness or absence from the city or enforced attendance upon another case. Here I think professional courtesy should be allowed to dictate as between the two physicians whatever terms of exchange of services may be mutually agreeable to them. This is not feesplitting; it is brotherly helpfulness.

Dr. T. L. Harrington, Milwaukee: Mr. President, I wish to speak with reference to one part of this report. The report deals with the Eugenies Law, and the chairman of the committee in making his report, states that it is fortunate, or words to the effect that it is fortunate for the people as a whole, that some of the profession swallowed their scruples and made these examinations. Now, Mr. Chairman, I simply rise to take ex-

ception to that portion of the report. Before the Supreme Court of Wisconsin decided the question that the Wassermann test was not required by the law, some of the physicians in Wisconsin were satisfied in their own minds that the law did not call for the Wassermann test, and consequently made these examinations without swallowing any scruples. After the Supreme Court decided this question, and this is the highest authority we have in the state, I made some of these examinations, and in making those examinations I did not swallow any scruples; therefore, I simply rise to take exception to that part of the report of the chairman of this committee.

Dr. Pelton: Just one word in regard to the swallowing of scruples. If you read that certificate correctly, I think if we signed those certificates we had to swallow the scruples. I simply have never signed one of those certificates until the amendment was made in our last legislature.

Dr. T. L. HARRINGTON: May I call the gentleman's attention to the fact that this is a matter of opinion, and my opinion is just as good as his?

Dr. J. McGovern, Milwaukee: In discussing the subject, Recent Medical Legislation, I wish to take up some of the bills not touched upon by Dr. Rogers. I feel that the medical legislation obtained from the last legislature was not what the medical profession of Wisconsin expected. We gained a few points, but lost a great deal of valuable ground. It is strange that a legislature that prided itself in its effort to consolidate boards and commissions should create a useless optometry board.

Our difficulty has always been that the average physician takes comparatively little interest in matters outside of his professional work. My experience for the past twenty years is that it is very difficult to arouse the medical men sufficiently to get them to wield the political influence in their respective neighborhoods that will bring results. Is that apathy due to the fear that they will injure themselves professionally, or are they so thoroughly absorbed in their work that they can not think of important medical legislation? I am not surprised to see a small body of active and well organized men representing some cult succeed in controlling the legislature and the opposition of a large body of medical men counted for nothing. If each doctor would take a lively interest in public affairs of all kinds and wield the political influence that is within his grasp the different members of the legislature would not be easily influenced by the optometry or chiropractor representatives. This apathy and lack of proper team work does not show alone in legislative work, but has a wider influence. When we look at the activities of the American Medical Association and see the many fields in which the association is making remarkable progress we naturally ask, what part is Wisconsin playing in this progressive program. Look over the names of the

officers and the list of members of the various standing committees and you will see that it is very difficult to find the name of a Wisconsin man. That is true not only today but it has been true for years. Here, again, the fault is lack of proper team work. One set of men are sent to the House of Delegates one year and another set the next year. The Wisconsin representatives appear to answer the roll call and make a report to the state society. If we wish to take a more conspicuous part in the activities of the American Medical Association, we must select capable men to represent us in the House of Delegates and keep them there until they get results. Select men who are deeply interested in the advancement of our Wisconsin profession. If we wish to wield the proper influence at Madison each of us must take a more active interest in the selection and election of the members of the legislature. Is it not a notorious fact that public officials who have the selection of medical men for public health work or to place them at the head of hospitals or sanitaria seldom consider or consult the wishes of the medical profession.

Your committee went to some expense and a great deal of trouble in preparing a law to aid in the commitment of the feeble minded and to revise the law governing the commitment of persons insane. A few politicians who were opposed to reform legislation, easily killed your bill.

Unfortunately, your committee was not a unit in action or purpose. Two of the three Madison members of the committee appeared to show far more active interest in two bills directed against the medical department of the State University than in the legislation favored or opposed by the other members of the committee. One of them stated in a Senate committee hearing on the two bills referred to above that he was in large part actuated by personal financial considerations and the activity shown by him and by a few other Madison physicians in support of the bills tended greatly to strengthen the belief so generally held by members of the legislature, but fortunately usually without foundation, that physicians have purely personal financial interests, not the public interest at heart, when they favor or oppose legislation relating to medicine or to public health. Since the legislative activities of the State Medical Society have always been based on considerations of the general welfare of the profession and of the public rather than on narrow personal interests and there were grounds to believe that this broad public interest was beginning to be appreciated, it is unfortunate that the activities of the Madison physicians referred to above were such as to strengthen the distrust of those who are skeptical of the altruism of the medical profession and thus to hamper the influence of the Medical profession in legislation for the public welfare. That this is true was shown by newspaper comment at the time the bills referred to were under discussion. It is also shown by the evident lack of influence of the medical profession of the State in determining the fate of such bills relating to medicine or public health as were passed or defeated at the last session of the legislature.

Were there time, I should like to sketch for you the history of the relations of the Dane County Medical Society to the medical school and to place before you evidence of the selfish motive which instigated the introduction of the bills referred to above and evidence of the unfair methods which were resorted to to get favorable action.

The purpose of one of the bills was to limit the work of the medical school to two years of non-clinical work although a certain amount of clinical work is now necessary in the first two years of the medical course, and to prevent the building of the physics or medical building, provision for which was made by the legislature of two years ago. A misleading pamphlet, signed by two Madison physicians, was printed and distributed among the members of the legislature in which it was claimed that the immediate establishment of a four year course in medicine at Madison was contemplated at large expense, although no such expansion in the near future was contemplated, or possible, and it was further stated that a new physics or medical building was unnecessary unless such a four year course was contemplated, although the building referred to is needed for work now being done at the University and would in no way make possible expansion along clinical lines.

The purpose of the other bill was to restrict clinical work at the University to medical examinations and first aid to students. This restriction would have prevented much of the valuable work now being done in preventing disease and improving the physical and mental development of the students. Furthermore, it would have so hampered the freedom of the physicians on the University faculty that self-respecting men could not well have continued to serve the University as members of the medical faculty. The furnishing of any medical service by members of the medical staff to other than students "gratuitously or for hire" was prohibited. The first bill was so modified before passage as to permit the proper development of the first two years of the medical course while the second bill was modified in the Senate and killed in the Assembly. The erection of a physics or medical building was authorized by a special bill.

It stands to the credit of the faculty of the Marquette Medical School that they materially assisted in blocking legislation referred to and it is very encouraging to see these two rivals in the educational world working together for the advancement of medical science and the betterment of the Wisconsin medical profession.

Dr. L. R. Head, Madison: Mr. President and Gentlemen: I very much regret that this matter was brought up today or at this session of the Medical Society. I think, as President Redelings has said, that it is a matter for local adjustment, one that the State Society is not interested in, and one that the Medical Department of the University and the Dane County Medical Society are amply able to settle.

The accusations made today by Dr. McGovern against the Dane County Medical Society would not affect me personally in the least. I would consider their erratic, venemous character and wide deviation from fact as supplying the best answer to them. But as the representative here today of the Dane County Medical Society I think I would probably be held remiss in my duty did I not say something in answer to this ill-advised attack. It is too long a story to go into the details of the matter here. The salient facts are briefly these: The founding of the medical school at Madison was permitted only on the pledge of the Board of Regents that it would be eonfined to a two years' course and that no efforts would be made to develop it further without legislative con-The clinical department of the University was established for the supervision of the health of the student body only, and for several years confined itself solely to the very commendable work of preventive medicine among the students for which it was established. but with the coming of an ambition on the part of a few interested men for the development of a full four year course at Madison, the further development of the elinical department became a necessary stepping stone to that end. The work of the clinical faculty was gradually extended to the full care of the students when ill, for which an entire floor at the Madison General Hospital was rented; then further to the faculty and employes of the University and still further to the citizens of Madison and the surrounding country. If this extension of the functions of the elinical department had been made to the poor and the indigent part of the community it would probably not so quickly have led to friction, but inasmuch as the well-to-do and wealthy were almost entirely the recipients of this service, many of the local physicians, especially among the younger men, felt that such practice was unfair, especially as it was rendered gratuitously. This with the evident favoritism shown in the reference of cases, engendered a good deal of ill feeling. The resolutions which Dr. McGovern has read were passed by the Dane County Medical Society with the purpose of bringing the matter before the medical faculty in the hope of arriving at some amicable adjustment of differences. Finally, at the request of Dr. Scaman, it was agreed that the matter should be brought before the medical committee of the Board of Regents, of which he was chairman. Drs. Sheldon, Harper and myself were appointed as representatives of the Dane County Medical Society to present their case. We spent an afternoon with the medical committee of the Regents, during which we went over the matter very thoroughly and presented a most fair and open statement of the complaint. A stenographer's report was made and we were asked to correct our statements and have them put on file for presentation to the Board of Regents. We did so. Up to this time we have never received the courtesy of a reply, and conclude that they were pigeonholed and as far as we ean learn never presented to the Board of Regents for consideration. So far as the Dane County Medical Society was concerned, that ended their participation in the matter in any way whatever, though they did feel that they had not been courteously treated, inasmuch as they had appeared before the committee at the request of Dr. Seaman and should have been accorded a reply.

The bills which were presented to the legislature were

drawn and presented without the knowledge of medical men by members of the legislature. The Dane County Medieal Society knew nothing of them and had nothing to do with them. Individuals of the medical profession, within and outside of the state, became interested in these bills because they represented in most respect their views. The brief which Dr. McGovern ealled your attention to was written especially in the interest of one of these bills. I, with Dr. Sheidon, assisted in the preparation of it. It embodied our reasons why a four year school should not be established at Madison and gave reasons for limiting the work of the Clinical Department to the care of the students, as was originally planned. There was no intention of injuring the medical department in any way. We with many other men of the state and alumni of the University outside of the state have always felt that the University should not carry its work into the elinical years. The passage of the bill has caused no harm, but has evidently aroused the wrath of several interested men. The individual physicians of Dane and other counties and those outside of the state who advocated this measure, yield to none in their loyalty to the University and believe that our aims were for the best interests of the University and medical education generally, and are willing to assume all responsibilities for our aets as individuals.

The University Medical Department does not need a vote of commendation. In a general way every one accords it that for the excellent work it has done in its proper field. This resolution which Dr. MeGovern presents is not offered so much in commendation of the Medical Department as in condemnation of the Dane County Medical Society. It is inspired by unworthy motives. The society does not merit it. This is no place for such things. Its passage would engender bitterness and inject into the State Society an element of discord not confined to Dane County nor to this session of the society.

Dr. GILBERT E. SEAMAN, Milwaukce: Mr. Chairman, if I may be permitted to say a word or two on this matter. I do not know but that I agree with the president of the society, that we will not get very far in the way of benefit in or interest involved by discussing this matter before the State Medical Society.

This matter was brought up last year by Dr. Head at Oshkosh, at least the other angle of the matter was brought up; and in the absence of members of the faculty of the medical school, or any representative of the University, Dr. Head made statements concerning the clinical department of the University which were, doubtless, honestly made, but which were mistakenly made. And at that time the Society took this action: It was determined that if any further discussion was to be had upon that question it would be in the presence of those who knew the University side of the controversy, and therefore it was deferred until the next day. The next day I met Dr. Head in the antercom of the meeting hall, and asked him whether this matter was to be continued in discussion. He said that it was not to be. To my surprise, I found that a long statement had been made by Dr. Head, which was recently printed in the

WISCONSIN MEDICAL JOURNAL, and which contains certainly some misinformation, and some misstatements. I would not say, however, and I do not say, that they were intentional misstatements.

Now, this is not a matter which concerns the local profession in Madison only; it is a matter which concerns the profession of the state of Wisconsin. The discussion of this question, and the controversy that arose from it, is one reason why we fared so badly in the legislature last winter. Several of the members of our Committee on Public Policy and Legislation did not take care of the business of that committee, but put in their time lobbying for those bills which sought to restrict the activities of the medical school at the University. However, the bills were not passed, and that is history, and I am very doubtful whether a continuance of the discussion would be profitable. But there are one or two points that I wish to refer to.

Dr. Head states that there was a pledge made by somebody to somebody not to develop the medical school at the University. I am here to say, that there never was any such pledge made by any responsible person, nor was there ever any such pledge exacted anywhere by anybody. And, furthermore, that no man, no private citizen, in this state, has the right to demand of the governing board of the University that they make any pledge as to what the development of any department of the University shall be in the future.

Dr. Head refers to an interview with the Committee on the Medical School. I happened to be the chairman of that committee, and had that interview with Dr. Head and Dr. Harper and Dr. Sheldon, and it was a very satisfactory interview, and it was very apparent to me that what Dr. Head and Dr. Sheldon and Dr. Harper said in that interview was not what they wished to give to the public. The statements that were made were made in an interview in the presence of a stenographer, among friends, and, therefore, instead of taking those statements as they were transcribed by the stenographer and making them public documents, I sent them back to Dr. Head and Dr. Harper and Dr. Sheldon for revision, and months passed before the copies came back, and when they did, they could not be recognized as the original copies; and I was very glad that it could not be recognized as the original copy, because the original copy was not good copy for physicians to send out, or to lay before any public body in this state.

Now Dr. Head says that that was pigeonholed, and was not presented to the Regents. I know that Dr. Head believes that that is the fact, but I should like, as chairman of the Medical School Committee, who handled that matter, to say that it was not pigeonholed, and that it was considered by the Regents.

DR. C. R. BARDEEN, Madison: I am going to save a part of the five minutes allotted. I am glad Dr. Head said what he did today, that he considers the attack on the Medical School at Madison purely a local matter to be settled locally. What we want to do is to work with the profession of the state. I think some of the trouble in Madison is due to the habit of quarreling in the pro-

fession that started before any medical school was there, and I hope that is all going to die out; and if Dr. Head will join in with me, I will be one of a committee of two to help to get rid of it. What we want to do is to have a united profession, to stand together for the good of the profession and the public.

# DIGEST OF PROCEEDINGS OF THE HOUSE OF DELEGATES AT THE 69TH ANNUAL MEETING, MILWAUKEE, OCT. 5-8, 1915.

Minutes of Meeting of House of Delegates, Tuesday evening, October 5th, 1915, 8:00 o'clock P. M.

Meeting called to order by the President.

The Roll Call by the Secretary showed a quorum present.

The report of the Committee on Public Policy and Legislation was presented by the Chairman Dr. J. P. McMahon.

A communication from A. C. Umbreit relative to the report was read by Dr. J. M. Dodd of Ashland.

After some discussion the matter was laid over to be taken up at a subsequent session.

The report of the Committee on Medical Defense was read by Dr. A. J. Patek and on motion duly carried was accepted and placed on file.

The report of the Committee on Publication was presented by Dr. A. J. Patek, Chairman, and on motion duly carried was accepted and placed on file.

On motion of Dr. Wilkinson, Oconomowoc, a vote of thanks for his past labors and successful editing of the Journal was extended to Dr. A. W. Myers, retiring editor of the Journal, and the Secretary instructed to notify Dr. Myers of the vote of thanks of the House of Delegates.

The Committee of 12 on nominations was elected as follows:

Dr. Hoffman, Dr. Bannen,
Dr. Kinney, Dr. Axtell,
Dr. Pember, Dr. Mason,
Dr. Cunningham, Dr. Oyen,
Dr. Crosby, Dr. Smiles,
Dr. Clark, Dr. Hayes.

The report of the Committee on Constitution and By-Laws was read by Dr. Rock Sleyster, Secretary, and on motion duly carried was laid on the table for further action by the House of Delegates. The report of the Committee on Neerology was read by Dr. J. P. McMahon, and on motion duly carried was accepted and placed on file.

On motion of Dr. Bannen duly seconded by Dr. Dodd, and carried, a committee consisting of Drs. Bannen, Peterson, Warfield, Caswell and Pember, was appointed by the House of Delegates to go over the letter of Attorney Umbreit and compare it with the data presented by Dr. McMahon and make a report at a subsequent meeting of the House of Delegates.

The report of the Delegate to National Conference on Medical Legislation and Medical Education was presented by Dr. J. P. McMahon and on motion duly carried was accepted and placed on file.

On motion duly carried, the report of Delegates to the Annual Meeting, A. M. A., as published was accepted and placed on file.

The report of the Chairman of the Council was presented by the Secretary, and adopted.

The reports of Councilors were presented to the House of Delegates.

The report of the Treasurer was presented by Dr. S. S. Hall, and on motion duly carried was received and referred to the Auditing Committee.

The House of Delegates adjourned to meet Oetober 6th, 1915, in the Club Room, Hotel Wisconsin, at  $9:00 \ \Lambda$ . M.

Minutes of Meeting of the House of Delegates held October 6th, 1915, at 9:00 o'clock A. M.

Roll Call by the Secretary.

The Minutes of the previous meeting of the House of Delegates was read and approved.

The report of the Secretary was read by Dr. Sleyster, and on motion duly carried, was accepted and placed on file.

On motion duly carried, the nomination of Delegates and Committees was referred to the Nominating Committee.

On motion duly earried, the Secretary was instructed to cast the ballot of the House of Delegates for the re-election of Dr. Hay as Councilor for the 9th District and of Dr. Cairns as Councilor for the 10th District.

On motion duly seeonded and carried the Ozaukee County Medieal Society was admitted to the State Medieal Society of Wisconsin.

The president appointed the following auditing committee:

Dr. Dodd,

Dr. Cairns.

Dr. Abraham.

On motion duly carried the report of the Special Committee on Revision of Constitution and By-Laws was taken up, and on motion duly carried, the recommendations up to Article 9, Section 1, middle of page 31, were adopted by the House of Delegates.

The proposed amendment to Article 9, Section 1, was taken up and discussed and a motion made and seconded to adopt.

An amendment was made and seconded as follows:

In regard to the election of a President and President-Elect as a compromise, to have the President elected for the Calendar year, the present President to serve until January 1st, the new President to begin his duties at that time. The motion as amended duly earried.

A motion was made and carried that the term of President Redelings be extended until January 1st, 1916.

On motion duly carried the sum of \$300.00 was set aside as a working fund for the Committee on Health and Public Instruction.

The report of the Auditing Committee was presented by Dr. J. M. Dodd, and on motion duly carried was adopted and placed on file.

. On motion the House of Delegates adjourned to meet October 7th, 1915, at 8:30 Λ. M., in the Gold Room, Hotel Wisconsin.

Minutes of Meeting of the House of Delegates, October 7th, 1915, at 8:30 o'clock A. M.

Meeting called to order by the President.

Roll Call by the Secretary.

Minutes of the preceding meeting were read and approved.

The matter of amending the constitution by striking out the words "Who is not in attendance upon that annual session and" in article 9, Section 3, was taken up and discussed, and the matter laid over to be taken up at the next meeting if deemed advisable, and acted on.

The Report of the Nominating Committee was presented recommending the following:

For President, L. F. Jermain, Milwaukee.

1st Vice-President, M. R. Wilkinson, Oconomowoc.

2nd Vice-President, M. S. Hosmer, Ashland.

3rd Vice-President, R. W. Blumenthal, Milwau-kee.

Delegates to A. M. A., T. H. Hay, Stevens Point.

Alternate, Rock Sleyster, Waupun.

Committee on Medical Education renominated. Delegate to National Legislative Council, A. M. A., Dr. G. Windesheim, Kenosha.

Delegate to Council on Medical Education, A. M. A., Dr. A. J. Patek, Milwaukee.

Committee on Mcdical Defense, renominated. Committee on Health and Public Instruction, Edward Evans, La Crosse; W. F. Zicrath, Sheboygan; J. M. Beffel, Milwaukee.

Committee on Public Policy and Legislation, renominated. Madison recommended as next meeting place.

Recommendation that the next president send 12 names to the Governor from which he can select the Medical Examiners.

On motion duly seconded and carried the report was adopted.

On motion duly carried the Secretary was instructed to send a telegram expressing sympathy, in the event of Dr. Sheldon's not being able to come.

On motion carried, the House of Delegates adjourned to meet October 8th, 1915, at 8:00 o'clock A. M.

Minutes of Meeting of House of Delegates, Friday, October 8th, 1915, at 8:00 o'clock A. M.

Meeting called to order by the President.

Minutes of last meeting read and approved.

Motion made that the letter from Mr. Umbreit and all attending discussion be expunged from the record.

Motion put and carried.

Motion made that the Secretary be authorized to publish each year the report of the various committees to be placed in the hands of the Delegates before the meeting.

Motion seconded, put and carried.

The report of the Committee on Prevention of Tuberculosis was presented by the Chairman, Dr. Thomas A. Hay, Stevens Point, and on motion duly seconded it was accepted.

The report of the Committee on Public Policy and Legislation was taken up and discussed and

motion made to accept report of the committee, which motion duly seconded and carried.

A resolution expressing appreciation of the work reported by Dr. Lorenz and extending thanks to the public and private interests whose co-operation made it possible to procure the results which make it easier for the medical profession to benefit the public, and that the Secretary be instructed to send copies of resolution to the Board of Control and members of the visiting committees of the Legislature was offered, duly seconded and adopted.

House of Delegates adourned.

# ABSTRACT OF THE PUBLIC MEETING TO DISCUSS THE CANCER PROBLEM.

At the Public Meeting at new Lecture Hall of Public Museum, 7:45 P. M., Thursday evening, Oct. 7th, 1915, the following proceedings took place:

The public Meeting was opened by President Theodore J. Redelings, who said in part:

The physician in his work meets three great obstacles, poverty, filth and ignorance. Poverty can be removed through the charitableness of physicians and others; filth can be removed by the equipment of the physician, and training; ignorance and prejudice are the great obstacles to the profession.

The purpose of the public meeting is to enlighten the public with reference to themselves, and enable them to better aid the physician to protest them against the ravages of disease.

Dr. Chester M. Echols of Milwaukee, acted as chairman of the meeting, and outlined the progress the medical profession had made through co-operation of the public in tuberculosis, appendicitis diphtheria and other diseases, by means of the dissemination of knowledge, as to the nature and management of those diseases.

The medical profession has been slow and diffident about taking the public into its confidence on the cancer problem, because the advantages of popular education in regard to cancer were not so clearly apparent at first, and there are still some things about cancer which the profession does not know.

Dr. John B. Murphy, Chicago, addressed the meeting. He said in part:

In the advancement of medicine the medical pro-

fession can keep but a few strides in advance of the education of the public. To put into practice medical knowledge, it is essential that the public be educated.

If the public could appreciate the early manifestations of cancer, much of the present mortality could be obviated. Cancer, with few exceptions, is induced by repeated mild chemical and metallic irritations, such as X-ray applications continually applied, disturbances in the gastric digestion producing chemicals and finally irritation, fractured teeth irritating the tongue, the pipe rubbing on the lip, etc.

Bone cancer has a very large element of trauma in its production.

Long before cancer of the true type begins, there is a pre-cancer stage, in which it is curable.

The brightest ray of hope that has come into cancer from my personal observation is the fact that 1/5 of all the cases are curable, even up to the time of death, by the radical removal of the local disease.

Cancer is steadily increasing.

Dr. Rodman, of Philadelphia, addressing the meeting. He said in part:

This public meeting was organized to instruct the public as to the danger of cancer, because cancer is on the increase, there being 75,000 deaths every year in the United States from that disease, one man in eleven, and one woman in eight after the age of 35, dies of cancer. Frequency of cancer of the breast and uterus is the cause of women paying the heavier penalty. Cancer of the breast and uterus each destroy 18,000 people annually. There are 26,000 deaths due to cancer of the stomach.

Cancer is believed to be a strictly local disease, and can not reasonably be looked upon as an hereditary disease. It is not an incurable disease in the ordinary sense of the word.

Cancer never begins in either the skin or the mouth unless there is a pre-existing lesion. It never grows from normal skin. Cancer of the stomach is due to irritation.

Dr. Joseph Colt Bloodgood, of Baltimore, addressed the meeting, making a plea to the press of the country to publish the important things for the public to know in regard to cancer, which represent the consensus of opinion of the medical profession of the world.

No one fears the beginning of cancer. When

fear comes, it is too late to do any good. Freedom from cancer depends absolutely upon heeding the warnings given by feeling or seeing, or the sensations carried to the brain from some part of the body of some change in the normal function. If information is given to the public and is faithfully and courageously followed, cancer is 90% curable, except in the liver, lung and brain, where it is least frequent. Where cancer is most frequent, not only is there warning but the surgical treatment is simple and not dangerous.

#### INTUSSUSCEPTION.

The early sypmtoms of intussusception, while there is time to save the infant, are reviewed by I. M. Snow, Buffalo (Journal A. M. A., Oct. 30, 1915). To diagnose intussusception during the second or third day is easy but the child dies if this delay is allowed. The symptoms are reviewed: Nearly always the baby is breast-fed and has a good disposition and digestion, but suddenly, without apparent cause, it eries bitterly, sometimes continuously, sometimes intermittently. The childs face is pinched in suffering, pale and eyanotic and a dangerous condition of shock is seen at a glance. After a few hours the symptoms of shock and pain cease for a while, due to an edema of the intestines, and this is deceptive. Associated with the initial pain is vomiting, aggravated by the food and laxatives so often given. It is rarely absent and in a healthy breast-fed baby is significant. The abdominal tumor of intussusception is a mass of telescoped ileum, eccum, colon and mesentery. It may be found in any quarter of the abdomen. It is nonsensitive and may disappear under the liver or in the pelvis. It may not appear and other symptoms may have to be relied on. At times the abdomen may be soft and relax, but later distended. After the obstruction is relieved there may be a persistent diarrhea. If the telescoped bowel is not released within twenty-four or thirty-six hours the child dies of pain, exhaustion and shock. To wait may be to lose the child's life, while to advise and force a dangerous operation on account of a mistaken diagnosis is a disgrace to the physician. Snow has several times seen the symptoms spontaneously cease, but when a suspicious ease is seen it should be closely watched. Opiates mask the pain until it is too late and food and laxatives will do harm. The jamming of the intestine causes swelling, congestion and irritation and blood and mueus are passed. A bloody mucous stool suddenly passed by a healthy baby is almost pathognomonic of intussusception and was absent in only one of Snow's sixteen eases. If the thermometer in the anus of the examining finger is covered with blood, together with the other symptoms mentioned, the diagnosis of intussusception is almost certain. Surgical consultation should be called at once and the responsibility shifted to the surgeon. A roentgenogram of the intestines after a bismuth injection is strongly advised. Four eases are reported.

### RELATION OF THE HOSPITAL TO THE COM-MUNITY.

Winford Smith, Baltimore (Journal A. M. A., Oct. 30, 1915), says the importance of the hospital to the community is well recognized but, strange as it may seem, there exists the greatest differences in standards, in fundamental principles, in organization, and in scope of work, with a vast amount of ignorance on the part of the public, physicians and hospital administrators as to what hospital efficiency means. The only one common factor of all is the purpose of trying to make sick people well. In America we have two main types of hospitals—the semipublic or endowed and the municipal or city hospital. It can be said without fear of contradiction that those that have done the best work, that have contributed most to medical education and medical science and have been managed with the best results in the interest of the patients have been the endowed hospitals. The municipal hospitals for the most part have been and are still interfered with by local politics, medical and otherwise, are insufficiently staffed, insufficiently supported and poorly managed. In England we find a somewhat similar condition, most hospitals there being supported by subscriptions. In Germany the majority and the best hospitals are supported by the state or municipality and used for the broadest purpose of service. In that country medical education and research are encouraged and supported. Our hospitals here serve two classes-the poor who cannot pay and those who can. In England adequate provision is made only for the poor. One of their greatest needs there, according to Sir William Osler, is that provision be made in the general hospitals for the well-to-do as well as the poor. In Germany the condition has been until comparatively recently somewhat the same. Smith asks, What is the rational basis of support and the scope of the work in this country? The state or city provides for the insane, the defectives and those suffering from tuberculosis. The cities provide for the care of contagious diseases and for a limited number of the poor, the majority of whom must get hospital attention from private philanthropy. Our system has worked fairly well with the burden thus unequally divided but the public hospitals are subject to the whims of legislatures and are not managed in accordance with business principles or equity. The cost of hospitals is increasing every year and while it is desirable to contime our endowed hospitals and encourage philanthropy, it is necessary to say that the state and municipal authorities must also recognize their responsibility. Hospitals should not be altogether charitable institutions to serve the fullest needs of the community; they should provide, for those who can afford to pay, at least as good service as they furnish to those who cannot. The hospital should also be an educational factor of the greatest importance to the community, sending out skilled practitioners, and it should also give the public the benefit of all the scientific advances which can aid. The education of nurses is also mentioned by Smith as an important service to the public, also the need of a private or semiprivate service for persons of moderate means who now do not obtain what they should have in this way. This should be provided for without limiting or encroaching on the funds given for the benefit of the poor. Special endowments are needed for this purpose and it is a matter that deserves the careful consideration of hospital authorities. In line with this is the question of a pay clinic or dispensary for the same class, and there should be one or two of these at least in every large city, where the services of specialists can be given and the patient should be able to receive what he needs at a cost within his means. Another point that deserves attention is the provision for patients after discharge as regards the care of themselves and their employment in the future, and while he does not think this is exactly a problem for the hospital, there should be some agency to provide for it. We have had examples of the possibilities in this line in the institutions for the blind, Dr. Halls Marblehead institution and Dr. Jaeger's Hospital of Hope in New York. The work should be based not on appeals to the sympathy of the employers but on demonstrating the fitness of the individual for his work and Smith wishes to urge the importance of this matter.

#### OSTEOPATHS AND THE HARRISON LAW,

"As anticipated, the federal government is having much difficulty in the administration of the Harrison law, owing to the fact that there is no uniform standard as to what constitutes the practice of medicine in the different states. Not only the definitions and provisions of the statutes, but also the decisions of various courts of last resort differ widely on this point. In some states, osteopathy is included in the practice of medicine; in other states, it is legally distinct. The dilemma of the Treasury Department is apparent from its conflicting rulings. Treasury Decision 2232, recently issued, revokes Treasury Decision 2172 and substitutes the following ruling: 'Osteopaths should be permitted to register and pay special tax under the provisions of the act of Dec. 17, 1914, provided they are registered as physicians or practitioners under the laws of the state and affidavit is made in application for registration on Form 678 as required by Treasury Decision 2215 of June 10, 1915.' This form is the one used by all physicians, and contains a statement sworn to by the applicant that he is practicing medicine at the time of making application. The intent of the Treasury Department in this ruling is obvious. If the ruling had provided for the registration of osteopaths in those states in which they are legally recognized as physicians, there would be no ground for criticism. The inclusion of the term 'or practitioners', however, leaves the entire question open to argument. What does the Treasury Department mean by 'a practitioner'? This might include Christian Scientists, clairvoyants, seventh sons of seventh sons, and every other fad or form of quackery. Suppose osteopaths are allowed to register under the Harrison law. What of it?" askes The Journal of the American Medical Association. "Such registration will not give them the right to practice medicine, unless they are given this right by the law of the state. Registration under the Harrison law will not confer any right to practice medicine not given by the statutes of the state."

# THE WISCONSIN MEDICAL JOURNAL

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L. M. WARFIELD, M. D., Editor 79 Wisconsin Street, Milwaukee J. P. McMAHON, M. D., Managing Editor 141 Wisconsin Street, Milwaukee

Publication Committee:

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#### EDITORIALS

#### CHANGE IN EDITORSHIP.

With this number of the Journal, the newly appointed Editor takes charge.

It is a pleasure to have this opportunity of expressing to our retiring Editor, Dr. Myers, the appreciation of his earnest labors in earrying the Journal to its present high place as a medical publication. The work which Dr. Myers has done speaks for itself, and is a tribute to his unfailing energy and high ideals.

The present Editor feels that he is undertaking a great responsibility in attempting to fill the retiring Editor's shoes. He, therefore, asks indulgence from his colleagues in the Profession, and promises that as far as in him lies, he will maintain the high standard set by his predecessor.

#### YOUR RECORD OF ATTENDANCE.

What is your record of attendance at your county medical society? Are you willing that it be published? Have you been "too busy" to attend or has it been necessary to stay at home and watch the "other fellow"? If the Jacobis, the Cabots, the Oslers, the Mayos, the Vaughans, are never "too busy" to attend medical meetings—are you?

The secretary recently attended a meeting of a county society in southern Wisconsin. In this county there are several small cities and villages and one larger city. At this meeting nearly every physician from the smaller places was present but not a single member from the large city. A discussion of this fact brought out the information that this is true of nearly all their meetings. In this county the city physicians are content to be, as one member put it, "the tail of the cow". They are "too busy" to attend! The result is not hard to forecast. Some day some of these "country doctors" will move to this city with a goodly share of this world's goods, and, by doing better and more scientific work, will force some of the busy ones to retire.

The discussion on attendance brought out some interesting suggestions. What can be done to overcome the indifference of the man who pays his yearly dues and never or seldom attends his medieal society? The secretary wants your ideas on this subject. How has your society met the problem? The Councilor of the district offered this solution—that in publishing the membership of the state society in the JOURNAL each year, each member's record of attendance at his county society be published with his name. What is your opinion? ARE YOU WILLING THAT Let us know. YOUR RECORD OF ATTENDANCE BE PUB-LISHED? R. S.

# THE NEW MEDICAL PRACTICE ACT.\*

Wisconsin is known throughout the country as a "Progressive State," a community which experiments with legislation. Some eall us a wide-awake

<sup>\*</sup>See article by Dr. B. F. Rogers in this number, p. 237.

state and envy us, others scoff at our half-baked attempts to write a multitude of laws on the statute books. We wonder what will be the judgment now, when the recently passed Medical Act is carefully read.

A critical perusal of the new Act leaves no doubt in anyone's mind that it was tampered with by every sect professing to practice the healing art. A sop to the osteopaths here, a present on a silver platter handed to the chiropractors there, an ignominious salaaming to the Christian scientists yonder, (had there been any herbovitors or spittotomists, they probably would have been allowed special privileges), raising the entrance requirements to two years of college work, after January, 1919, for allopaths and osteopaths, recognition of osteopathic surgery, those are some of the features.

Although we object to being classed with osteopaths in the constantly recurring sentence "reputable college or school of medicine and surgery or of osteopathy and surgery" (principally because we do not know of a school of osteopathy which, by our standards, would be called reputable), we must admit that if we read the bill correctly, the osteopaths will have to hustle some to get by a real State Board of Medical Examiners after January, 1919. Here is what we read.

"All applicants having presented satisfactory evidence of such preliminary education (i. e. high school until 1919, then two years of college work in physics, chemistry, biology, and either German or French) shall be examined by said Board in the subjects of anatomy, physiology, general diagnosis, patholgy, histology, chemistry, hygiene, and sanitation. All persons so applying, no matter what school or system of treating the afflicted the applicant may claim or intend to follow, shall submit to the same examination in the subjects just enumerated."

We discover that there is such a mongrel as osteopathic surgery. We should guess that the osteopaths intend to do spinal surgery only. A better guess is that they want to handle instruments and increase the danger of life, now-a-days dangerous enough. Also,

"Any person duly licensed to practice osteopathy in this state at any time prior to the first day of January, 1916, shall be licensed to practice surgery, upon passing the regular examination of the Board in surgery, and presenting evidence of having completed an adequate course in surgery at a reputable school or college of osteopathy and surgery, requiring not less than twenty months actual attendance thereat."

Listen, Percy, a reputable school or college of

osteopathy and surgery requiring not less than twenty months actual attendance thereat!

But wait. There is a ray of sunshine. Suppose the State Board of Medical Examiners should actually give a real examination in surgery to such a prospective candidate? Could he pass? Ay, there's the rub, as Bill says. Let us hope that our Board will rise to a high plane and refuse to come down one peg.

Lest there be those who think we are joking, just read these two provisions:

"Section 1435e. Exemption of chiropractors. Reputable (sic) practitioners of chiropractic may practice their profession in this state, provided that they do not represent themselves to be or hold themselves out as registered or licensed; and provided further, that there is conspicuously displayed in the offices or places where they practice their profession, a sign or signs containing the following words in large and legible type, "Not registered or licensed in Wisconsin," and

"Section 1436a. Exemption as to Christian Science. None of the provisions of this act or the laws of this state, regulating the practice of medicine or healing, shall be construed to interfere with the practice of Christian Science, or with any person who administers to or treats the sick or suffering by mental or spiritual means, nor shall any person who selects such treatment for the cure of disease be compelled to submit to any form of medical treatment." (Italics are ours.)

Can you beat it? A kick in the solar plexus from the League of Medical Freedom.

Now, who is responsible for all this compromise? Surely not the Committee on Public Policy and Legislation. We saw their bill. It was a splendid bill, and would have set a high-water mark in medical legislation. We happen to know that this bill was not fathered by the State Board of Medical Examiners. No, Brethren, this bill was engineered by one man, not a physician, but one who occupies a position of more or less standing through his connection with the State Board of Medical Examiners, and who apparently took it upon himself to make such ignominious compromises in order to write into this bill the two years college clause which was advocated by the State Board of Medical Examiners, the State Medical Society, and Marquette University School of Medicine. This is done, but at what a sacrifice.

Our students must have two years of college education, four years of medical school. Then they compete with uneducated charlatans recognized by the State of Wisconsin. We have read the bill carefully, and are frankly disappointed. The splendid bill drawn up by our Committee on Public Policy and Legislation bears to this bill the relation of a well-formed child to an aneneephalic monster. It was too much to hope that such a real public measure would pass. The public is willing to take chances on the isms and pathies, so be it. When the smoke clears away, it will be seen that we have made it harder for students to obtain a real medical education. On the other hand, the various sects have oiled their ways and thus made the paths into their folds easier.

#### A NEW JOURNAL.

We are in receipt of the first number of The Journal of Laboratory and Clinical Medicine, which is edited by a group of well known laboratory men and Clinicians from various parts of the country. Dr. V. C. Vaughn is Editor-in-Chief. The C. V. Mosby Co., St. Louis, is the publisher. The Journal will appear monthly, price \$3.00 per annum.

In an introductory editorial, Dr. Vaughn voices the general sentiment of the profession by asking "Why start a new medical journal?" He sees a need for a medium of communication between the laboratory and the actual daily practice of medicine which will give to the practitioner the most recent results of research, and enable him to apply them in his daily work.

It is true to a great extent that the laboratory worker cannot see the practical problems which face the man who actually treats the people for their many ailments; and it is as equally true that the latter has reason to be disgruntled with the strictly, we might almost say, ultra-scientific product of the pure research worker.

This new Journal will attempt to get the goods over to the man at the front. Surely this is a worthy purpose. We trust this can be done, and we wish the new Journal much success in the field it has chosen for its own.

#### AN OVERSIGHT.

It was remarked by many doctors who were at the recent meeting of the State Society that there was no exhibit of X-Ray plates. For the past two years there have been such exhibits. They were well attended, comment and criticism were freely passed, and much undoubtedly was learned by all. Those who were at the meeting at Oshkosh will recall the splendid array of plates which were there on exhibition. The stands were of cheap construction, but the illumination was excellent, and many deserved compliments were paid to the men who arranged the exhibit.

Diagnostic help given by X-Ray plates reaches every branch of medicine. Year by year improvements are made in the machines, men become more skilled in handling them, interpretations are of more value because of added experience, and it would therefore seem that provision should be made by the Society for adequate aecommodation for those who have plates to show. We think this matter should be seriously considered. If it is a question of money, then the Committee of Arrangements should have power to spend what is necessary for room and stands. Our meetings should not lack in any feature that is of such great interest and value to all the members.

# THE COLOR OF OPERATING ROOMS.

It has been for a long time a source of wonder to us that the glaring white is used in the operating room. From conversation with surgeons in a number of hospitals at widely scattered places, we found that all agreed that such a mass of diffuse light was tiring to the eyes, and did not illuminate the operating field.

We are pleased to find that Sir Berkeley Moynihan (Laneet. Sept. 18th, 1915) for over two years has been operating in a room, the walls of which are green and the gowns, sheets and towels are the same color. He says that this color is restful to the eyes, the instruments and suture material can be readily seen on the green sheets, and material can be bought which is cheap and does not fade when washed.

A light reflected on the field of operation with such a restful color around certainly seems more logical than the present universal glaring white rooms and appurtenances. How about giving this a trial?

# THE AMERICAN FIRST AID CONFERENCE

We print in this issue a series of resolutions passed at the first meeting of The American First Aid Conference held at Washington, D. C., August 23d and 24th, 1915. Extended comment is quite unnecessary. All who will take the trouble to read these resolutions and questions cannot fail to see the great importance of such a movement. We would call particularly to the attention of railroad and industrial surgeons this matter, as it most vitally concerns them. It is hoped that our State-Society will aid by appointing a committee of surgeons to collaborate with the Central Committee.

#### The American First Aid Conference:

Your Resolution Committee has the honor to report that it has carefully considered the resolution which was committed to it and has redrafted it as follows:

Whereas, There is a great lack of uniformity in first aid methods; in first aid packages, and in other first aid equipment; and in first aid instruction; and,

WHEREAS, Many of the aims of first aid are defeated thereby and needless suffering and expense incurred; therefore, be it

RESOLVED, That this Conference recommends to the President of the United States that he appoint a "Board of First Aid Standardization." said Board to consist of one officer each from the Medical Corps of the U. S. Army, the Medical Corps of the U. S. Navy, the U. S. Public Health Service, the American National Red Cross, the American Medical Association, the American Surgical Association, and the Association of Railway Chief Surgeons of America; this Board to deliberate carefully on first aid methods, packages, equipment and instruction, and to recommend a standard for each to a subsequent session of this Conference to be called by the Permauent Chairman; the creation and maintenance of the said Board to be without expense to the United States.

Your Committee further reports that it has personally consulted the Assistant Solicitor of the Treasury, and he has given the opinion that there is no legal objection to the resolution or its purpose.

The Committee has also personally consulted the Secretary to the President, and he has also assured your Committee that it is his personal opinion that the President will take favorable action in the premises.

Committee on Resolutions:

W. C. RUCKER,
Asst. Surgeou Gen. U. S. P. H. S.
Major Robert U. Patterson,
M. C. U. S. A.
Representing the Amer. Nat. Red Cross,
W. L. Estes,

Chm. Com. on Fractures, Am. Surg. Assn.

The following resolution was passed at this meeting: That the questions noted below be sent to the Chief Surgeons of Railroads, Mines and Manufactures, first, to be answered by them; second, that a copy of these questions be sent by the Chief Surgeons to their Associate Surgeons,

The object of these questions is to attempt to get the

opinion and experience of a number of surgeons and to formulate them for publication.

Please answer each question on a separate sheet of paper and sign your name to each sheet:

- 1. What has been your experience with the most available first-aid package and dressing for small and large wounds?
- 2. What has been your experience with the immediate employment of antiseptics in accidental wounds; what antiseptic have you used, in what strength, and how applied? Have you employed tineture of iodine? If so, how, and what have been the results?
- 3. What in your experience has been the most efficient and most readily applied method of fixation for injuries of the (a) upper and (b) the lower extremity?
- 4. Have you considered the construction of a stretcher which, in addition to serving as a means of transportation of injured, will have appliances for the fixation of the upper and lower extremity, somewhat along the lines of a Bradford splint, or the Gihon uaval splint?
- 5. Please state your views on some liquid ointment dressing which would be available for first aid in large wounds and burns with the object of preventing the usual dry-gauze dressing adhering to the wound and rendering subsequent dressings painless.

#### THE PREVENTION OF BLINDNESS.

We surmise that very few of the general profession realize the great amount of prophylactic work that is being carried on by the National Committee for the Prevention of Blindness. The two chief causes of blindness in children are ophthalmia neonatorum and trachoma, the latter a disease brought to this country by the immigrants of Sontheastern Europe, in spite of the precautions taken by the Bureau of Immigration.

In letter No. 3, sent out by the National Committee, occurs this hopeful statement: "While ophthalmia neonatorum (babies' sore eyes) continues to send to the schools for the blind a large percentage of unfortunate children (nearly 100 in the school year 1914-1915) (New York), a gratifying reduction is shown by comparing the reported percentages for the five years since 1910. Of the new pupils entering in each of the following years the per cent blind from babies' sore eyes is:

1910-11	 23-9%
1911-12	 21-2%
1912-13	 22-7%
1913-14	 19-6%
1914-15	 15-1%

The strange part is that a disease which can be

so readily prevented by a couple of drops of an easily obtainable solution still claims so many victims. It is a sad commentary upon our lax regulations regarding the birth of the nation's children.

#### OSLER ON MEDICAL SOCIETIES.

"The well-conducted medical society should represent a clearing house, in which every physician in the district would receive his intellectual rating, and in which he could find out his professional assets and liabilities. We doctors do not 'take stock' often enough, and are very apt to carry on our shelves stale, out-of-date goods. The society helps to keep a man up to the times, and enables him to refurnish his mental shop with the latest wares. Rightly used, it may be a touchstone, to which he can bring his experiences to the test and save him from falling into the rut of a few sequences. It keeps his mind open and receptive and counteracts that tendency to premature senility which is apt to overtake a man who lives in a routine."-Osler's R. S. Aequanimitas.

#### FROM THE CITY OF BROTHERLY LOVE.

The methods employed to separate an individual from his money are many and devious. While it is no longer considered proper to waylay a man and forcibly take his goods, civilization has advanced to the point where finer and subtler methods are used to the same end. Among doctors there has ever been good fishing. However, we lay no claim to a monopoly of suckers in our ranks. We note with satisfaction, albeit with regret, that bankers and lawyers "fall" for the confidence man not infrequently.

A member of the Medical Society of Milwaukee County has sent in the following communication:

# "THE PHILADELPHIA POST-GRADUATE INSTITUTE."

An organization composed of members of the professions having for their object the promotion of the public welfare, in so far as it may be accomplished by race betterment, the alleviation of suffering and the conquest of disease.

The object of the organization is to obtain, through the co-operation of its members, composite opinions upon matters in vital relationship to the physical and mental improvement of humanity at large in general, and of its members in particular.

#### ELIGIBILITY TO MEMBERSHIP.

Any person of good moral character, who is devoting the whole or part of his or her time and talents to the study or practice of any branch of the healing arts and sciences, or who is engaged in the pursuit of any allied calling, may become a member of this association, provided that such person has attended a school, seminary, college or other institution of learning in which any of these sciences, arts or branches thereof, or co-related subjects are taught.

#### ADVANTAGES OF MEMBERSHIP.

Members are privileged to submit to an Advisory Council, selected from among their number, any questions or inquiries upon any subject upon which information is desired. Such inquiries will immediately be referred to the member who, in the opinion of the management, is best qualified to render an expert opinion.

The value of this service to the individual is largely enhanced by the fact that back of it all is an organization of men who are interested in the professional and financial welfare of its members, and who are anxious to co-operate in every possible manner; getting in touch with him, learning under what conditions he is working; what experience and qualifications he may have, and what he desires to accomplish.

The central problem of every professional man is: "How can I develop myself?" It makes no difference what his position may be, the only way to enlarge his influence and increase his income is to enlarge and improve himself. This we help you accomplish by means of direct advice on professional matters, office methods and equipment, establishing proper relations with your elientele, developing specialties, and by friendly criticisms of plans or projects, indicate the best course to pursue.

To develop your calling to the point of success demands brains, not erude, but trained; thought, concentrated and effective; knowledge, not general but organized, practical and constructive, in the form of a systematic summary of the lessons taught, perhaps by the mistakes, but surely by the successful experience of others.

The services of the Advisory Council are rendered without charge to members, except when an unusual amount of research or investigation is required.

#### A CERTIFICATE OF MEMBERSHIP

Artistically designed and skillfully executed on heavy Japanese vellum will be issued to each member, his name and degrees suitably engrossed thereon. Its size is 19x24, and when properly framed will compare favorably with any eertificate of like character ever issued. Its possession confers upon the holder the stamp of progress and when judiciously displayed will add to the dignity of any office.

#### HOW TO BECOME A MEMBER.

Anyone desiring to become a member of The Philadelphia Post-Graduate Institute is requested to supply the information called for on the enclosed application blank, and forward same with the

#### LIFE MEMBERSHIP FEE

of Twenty-five dollars (\$25.00). (There are no annual dues.)

On receipt of the application, it will be immediately acknowledged and, if approved, the certificate of membership will be sent prepaid, as soon as the name, degrees or titles can be engrossed.

If the application is rejected, the fee will be returned intact.

THE PHILADELPHIA POST-GRADUATE INSTITUTE,

No. 708 Chestnut St., Philadelphia, Pa., U. S. A.

THE PHILADELPHIA POST-GRADUATE INSTITUTE,
708 Chestnut Street
Philadelphia.

We are sorry all cannot see the "artistically designed" specimen copy of the certificate made out to Charles D. Warburton, Doctor of Medicine and Master Rectal Specialist (whatever that last specialty is). "When judicially displayed will add to the dignity of any office."

Dr. J. D. Albright, we find, is a specialist, exclusively, in Urology. He is not a member of the American Medical Association, nor, therefore, of his local society. He is a graduate of the Medico-Chirurgical College of Philadelphia in 1893.

If any physician has twenty-five dollars to throw away, let him cast it into the coffers of his State Journal. We will even grant a certificate which can be framed and hung in the office, and we will also endeavor to answer any questions which he might feel impelled to ask of us.

We wish to thank the Doctor who put the information concerning this "Institute" into our members of the State Medical Society to refer to us all questionable propositions, such as this one evidently is. A word of comment and warning may save dollars for some who can ill afford to take chances.

#### J. D. ALBRIGHT, M. D.

President.

DEAR DOCTOR:-

You are invited to become a member of this organization, complete details of which will be found in the enclosed prospectus. Since you specialize along certain lines in your practice it is no more than fitting and proper that your specialty should be emphasized on the certificate by the use of an appropriate title.

The following list of titles is appended in order that it may serve as a guide or lead to the suggestion of any suitable title which you might wish to use in addition to your regularly conferred degree.

Very truly yours,

J. D. Albright, M. D.

Specialist in Internal Medicine. Nerve Specialist. Specialist in Nervous and Mental Diseases. Neuro-Mental Specialist. Neurologist and Psychiatrist. Master in Neurology. Expert Pathologist. Pathologist and Bacteriologist. Eye, Ear, Nose and Throat Specialist. Ophthalmologist. Oculist and Aurist. Rhinologist. Laryngologist and Otologist. Expert Refractionist. Optometrist. Master Proctologist. Master Rectal Specialist. Specialist in Rectal Diseases. Master Pelvic Specialist. Rectal and Urogenital Surgeon. Hernia (or Rupture) Specialist. Genito-Urinary Specialist. Urogenital Specialist. Urologist. Orificial Surgeon. Specialist in Urology and Dermatology. Dermatologist. Specialist in Skin and Blood Diseases. Specialist in Chronic Diseases. Electro-Therapeutist. Specialist in Electro-Therapeutics. Expert X-Ray Operator. Specialist in X-Ray Diagnosis. Certified Anesthetist. Specialist in Spondylotherapy. Specialist in Spinal Adjustments. Expert Chiropractor. Mechano-Therapist. Physio-Therapist. Neuropathist. Hydro-Therapist. Osteopathic Specialist. Food Expert. Expert in Hygiene and Dietetics. Hygienic Adviser. Registered Nurse. Certified Nurse and Masseuse. Certified Masseur (or Masseuse). Foot Specialist. Surgeon Chiropodist.

Expert Chiropodist.

#### A CLEVER IDEA.

This shows how one man solved his problem of taking the "cure" at home. The patient had left the sanatorium, and wished to continue the open air treatment, which had done him so much good. He found a bargain in some discarded shutters, and built himself this shack.

Possibly this may help to give some idea of the way a very serious problem may easily at times be circumvented.

# THE TREATMENT OF DIABETES. SPECIAL ARTICLE,

The sum of all the work which has been done on diabetes seems to lead to the inevitable conclusion that it is not a disease as we understand infection as a disease, but a functional derangerecovers, and the individuals again metabolize the sugar in the food. One might draw an analogy between this condition and broken cardiac compensation, and call such a transitory loss of pancreatic function pancreatic decompensation,

To carry the analogy still further, we know that every succeeding cardiac breakdown leaves the heart in worse condition than before, the reserve force is lessened, and the limit of safety is reduced, until finally there is practically no reserve force, and the patient is an invalid, scarcely able to brush his hair without urgent dyspnea and palpitation of the heart. The same sequence of events may be applied in the case of the pancreas.

Now, Allen, on the basis of his experiments with the removal of various portions of the pancreases of dogs found that with a certain amount of pan-



Courtesy of the Crusader

ment of metabolism of glucose, a loss of power to utilize sugar. The internal secretion of the pancreas formed in the islands of Langerhans makes possible this utilization, and it is deficiency of this secretion which brings about the aberrant metabolism, and produces thereby a state which we call diabetes.

This does not mean a destruction of the islands of Langerhans. Such is not the case in many diabetics. There is an overstrain of this tissue, possibly from hereditary weakness, possibly from some infection, possibly from general heightened metabolism as in pregnancy, which breaks down the threshold of safety and finds the pancreatic tissue anable to cope with the situation. Glucose appears in the arine. The patients diet, the tissue

creas removed he could prevent or produce diabetes at will by feeding. This is the crux of the matter and Allen's chief contribution to the subject.

"When about nine-tenths of a dog's pancreas is removed, the resulting condition may appear as a progressive fatal disease. But obviously we have produced not a disease, but merely the weakness of a certain function. If we try to keep the dog fat, and satisfy his large appetite, he goes steadily down-hill for several months, and dies in extreme eachexia. But we can stop glycosuria by fasting, and can then place the animal on a low diet which will support life without producing glycosuria. Such an animal is thin, but strong and lively, with no cachexia and no sign of downward tendency. The treatment for patients is similar."

Another fact brought out by Allen is that in spite of acetone and diacetic acid in the urine, the carbohydrates can suddenly be reduced. Instead of producing coma, the fasting actually reduces the acidosis and enables the overworked and excessively stimulated pancreatic function to recover. Obviously this can never be a complete recovery. The subject will always have to diet, but if he is careful, he may keep his urine free from sugar, and add to his comfort and safety.

As soon as the patient is seen, he is given a general diet for two days, and the glycosuria measured in grams of sugar. Then he is at once put to bed and given nothing but coffee with saccharin or without, water, and an ounce of whiskey every two hours from 7 A. M. to 7 P. M. If there is acidosis, sodium bicarbonate may be given for the first few days only. The fast must last until the urine is sugar-free. This may take from two to ten days. The fast is then continued for 24 or 48 hours longer, after which the first food is given. From this point enters the individualization of the treatment. The first day 200 grams of string beans, carrots, asparagus, spinach, cucumbers or celery can be given. If the case has been severe, it may be advisable to boil the vegetables twice, throwing away the first water. This reduces the carbohydrate content. From now on, there is an increase, adding variety, as cabbage, onions, parsnips, etc., vegetables with low carbohydrate content.

At the first sign of glycosuria there must be another fast day, and the treatment started from the beginning. If the patient does well, eggs, bacon, meat, fish, butter, cream, soy bean flour biscuits, and nut biscuits may be gradually added. The progress must be slow, and the urine examined daily or oftener, until both the proteid and carbohydrate tolerance is known. By keeping below these points, the patient may be comfortable.

At times, it may seem more advisable after the fasting period to try out the protein tolerance. Diabetics exerete sugar on a diet rich in proteins. Cases in which there is considerable loss in weight are those best adapted for the protein diet in order to replace, as far as possible, the tissue waste. The first day one or two eggs are given. More protein, as eggs and meat is added gradually day by day "until the patient either shows glycosuria or reaches a safe protein ration."

No attempt is made to make the patient gain

in weight. This is not only considered unnecessary, but positively harmful in many cases.

It must be distinctly understood that no severe diabetic is absolutely curable in the sense that the normal pancreatic function will be re-established. How long a diabetic can live after remaining sugar-free always is not yet known, as no one has cases which are over one year under observation.

Experimentally, the treatment is sound, and it awaits elinical confirmation.

L. M. W.

Allen, F. M. Studies concerning Glycosuria and Diabetes, Harvard University Press, Cambridge, 1913.
Allen, F. M. Studies Concerning Diabetes. Journ. Amer.

Med. Assn. Sept. 12th, 1914.

Med. Assn., Sept. 12th, 1914. Allen, F. M. The Treatment of Diabetes. Boston Med. & Surg. Journ., Feb. 18th, 1915.

Hill, L. W., and Sherrick, J. L. Report on the Allen Treatment of Diabetes. Boston Med. & Surg. Journ., May 13th, 1915.

#### NEWS ITEMS AND PERSONALS

Dr. W. E. Troxler has resigned as assistant surgeon at the National Soldiers Home. Dr. W. C. Mashburn succeeds him.

Dr. F. A. Walters, Stevens Point, will be a candidate for mayor of that eity at the spring election.

Dr. A. B. Jensen, Menasha, who underwent a serious operation, is convalescent.

Dr. R. C. Teschan, Milwaukee, is defendant in a \$10,000 damage suit brought by George J. Hennell, as the result of an accident in February, 1914, when the doctor's automobile collided with motorcycle driven by the plaintiff.

Dr. W. T. LOCHEMES. Milwaukee, for many years county physician for the south side district, has resigned. "Too many professional paupers" is the reason given for his resignation. He is succeeded by Dr. A. J. Heller.

Dr. W. C. Bennett, has resigned as deputy state health officer, and located at Rhinelander for the practice of his profession. Dr. I. L. Thompson, Reedsburg, is filling temporarily the position vacated by Dr. Bennett.

DR. WILLIAM C. COMEE, Seymour, is taking special work in eye, ear, nose and throat under Dr. Albert H. Andrews, Chicago. He will return to Seymour about December 15, 1915.

Objections, to probating the will of the late Mrs. Antoinette A. Keenan, which created a \$300,000 trust fund for founding a free medical dispensary in Milwaukee, have been filed by M. M. Hayden, a nephew, alleging that the will was not duly executed, was not signed by Mrs. Keenan as required by law, that she was not competent to make a will, and that it was not her free act and deed.

Columbia Hospital, Milwaukee, is to be removed from the west side to the east side of the city. The old building will be disposed of and a new one containing 100 beds is to be built. Plans are not yet ready. It is understood when completed this will be one of the finest hospitals in the northwest.

Superior, Ashland, Eau Claire, Marinette, Green Bay and Rhinclander, are contending for the new laboratory to be located in upper Wisconsin, in accordance with a new state law. The laboratory will be a branch of the state hygienic laboratory, and the sum of \$2500 will be appropriated annually for its maintenance.

Five new county sanatoria will doubtless be added to Wisconsin's institutions for the treatment of tuberculosis as the result of action to be taken by various county boards this fall. Among the counties in which the campaign is definitely under way are Marathon, Grant, Jefferson, Dunn and Fond du Lac.

Wisconsin spent \$1,077,595.57 for the care of insanc, feebleminded and tuberculous patients during the last year, according to the complete audit issued by the state Board of control. Of this total \$617,335.62 was paid by the state and \$460,259.95 by the counties.

9230 diagnoses of bacteriological specimens were made last year by the State Laboratory of Hygiene at Madison to aid the physicians of the state who lack laboratory facilities or are too busy to do their own bacteriological work. The service is free, and for the work a thoroughly equipped laboratory and a staff of seven experts are maintained.

The Wisconsin sterilization law will be in effect November 1, 1915, according to statements of the state board of control, with twenty-four operations on patients in the feeble-minded institution at Chippewa Falls. The law on this subject was enacted at the 1913 session of the legislature.

The Milwaukee Health Department is planning to extend its free public service to a food survey, which will give the public comparative nutritive values of various food products. The city chemist is already making analyses of various foods, and the report will shortly be given to the public.

A total of 19,626 cases were treated in the free clinics of Marquette University medical school, during the twelve months ending July 1, 1915. Of this number 3,489 were new cases. In Trinity Hospital clinic 7,382 cases were treated and 12,244 at the college building. Eye cases lead the list with a total of 5,264, ear, nose and throat are second with 3,337 cases. The attending physicians gave 1,501 treatments for tuberculosis and 2,279 patients entered the surgical clinics. March set the record for the year with 2,109 cases.

The attorney general has been asked for an opinion as to the right of the European Medical Clinic of Racine, a corporation to practice medine and advertise as an authorized practitioner of medicine in this state, by A. C. Umbreit, representing the Wisconsin State Board of Medical Examiners.

A new set of instructions, for physicians and others required to report communicable diseases, has been issued by the State Board of Health. Cases of diphtheria, scarlet fever, small-pox, cerebro-spinal meningitis, Asiatic cholera, typus fever, bubonic plague, typhoid fever, measles, whooping cough, chicken-pox, mumps, erysipelas, tuberculosis of any organ, and trachoma, must be reported within twenty-four hours. Diphtheria and membranous croup cases must be quarantined at least fourteen days. Minimum quarantine for scarlet fever is twenty-one days, for small-pox, until all scales have fallen off, for spinal meningitis fourteen days, for typhus fever, until after complete recovery. A special form of blank is to be furnished physicians for reporting cases of venereal diseasc.

#### REMOVALS

Dr. Neal S. Simons has removed from Whitehall to Taylor.

Dr. P. M. Sinz, Fond du Lac to Butternut.

Dr. J. M. Van der Ven, Baldwin to Martell.

#### **MARRIAGES**

Dr. Charles A. Balkwill, Grafton, and Miss Emma Marie Pinkham, Hillsdale, Mich., on October 12, 1915.

#### **DEATHS**

Brigadier-General George M. Sternberg, aged 77 years, retired, died on November 3, 1915, at Washington, D. C. He was surgeon-general of the army from 1893-1902.

In September, 1880, he inoculated rabbits with his own saliva and isolated a micrococcus. He did not publish his results until April, 1881. In the meantime Pasteur discovered the same organism in the saliva of a child dead of hydrophobia in December, 1880, and published his findings in January, 1881. However it was not until 1884 that A. Fraenkel determined that the coccus found by Sternberg and Pasteur in the saliva, and known as the coccus of sputum septicemia, was the most frequent organism in acute lobar pneumonia. Although the diplococcus lanceolatus is known generally as the Fraenkel and Weichselbaum diplococcus. Sternberg first isolated it and determined its pathogenicity for animals.

Dr. Sternberg contributed many articles to the literature dealing purely with research as well as articles dealing with military matters.

Dr. Michael Kenny, Manawa, died suddenly on October 23, 1915, of heart failure, aged 40 years. He was a graduate of Marquette University, department of medicine in 1911.

Dr. S. Gordon Todd, Oshkosh, died on October 13, 1915, aged 47 years, of pneumonia.

Dr. Todd was born in Canada in 1868. He was a graduate of Trinity Medical College, and Queen's University, Kingston, Ontario, in 1890. He had

practiced for about twenty-five years, coming to the city of Neenah fourteen years ago, and to Oshkosh two years ago.

He was a member of Winnebago County and the State Medical Societies, the Milwaukee Oto-Ophthalmic Society, and the American Academy of Ophthalmology and Oto-laryngology.

Dr. Ira M. Martin, Green Bay, died suddenly of heart disease on October 25, 1915, aged 50 years.

Dr. Martin was born at Eaton, Ind., November 4, 1865. He was graduated from the Kentucky School of Medicine, Louisville, in 1891. He practiced at Raymond Center, Wisconsin, for about twelve years. Nine years ago he located at Green Bay, and had resided there up to the time of his death.

He was a member of Brown County and the State Medical Societies.

#### CAMPHOR, NATURAL AND SYNTHETIC.

"The present war, by cutting off from Germany the supply of Japanese camphor, has naturally stimulated among German clinicians an interest in the possibility of substituting artificial for natural camphor in medicinal use. The government therefore recently ordered clinical tests made. Synthetic camphor, used externally and in moderate doses internally, has been reported as having the same effects as natural camphor. The published clinical reports, however, are few and the details are somewhat meager. The announcement of a manufacturer that synthetic camphor has been fully established as equal in medicinal value to natural camphor therefore appears premature. The substitution of synthetic camphor for the natural product in medicinal use seems unwarranted where no necessity exists, at any rate, until the discrepancies in the evidence have been cleared up. Even Levy and Wolff, who report having found the former a satisfactory substitute for the latter product, warn against using more than 1 gm. in a single dose, on account of the greater toxicity of the artificial sub-

"The pharmacologic evidence with regard to camphor is confused and contradictory, and the clinical evidence is naturally still more so. On the subject of the clinical value of natural camphor there are many diametrically opposed opinions. While in Europe camphor is widely used for circulatory actions, especially in threatened cardiac failure, certain English and American observers," says The Journal of the American Medical Association, "have been unable to detect any action from camphor which would justify reliance on it as a cardiac stimulant. Further observations are much to be desired."

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

Officers 1915-1916

T. J. REDELINGS. President L. F. JERMAIN, Milwaukee President-Elect M. R. WILKINSON, Oconomowoc
1st Vice President
R. W. BLUMENTHAL, Milwaukce, 3rd Vice President

M. S. HOSMER, Ashland 2nd Vice President

ROCK SLEYSTER, Waupun, Secretary

S. S. HALL, Ripon, Treasurer

Councilors TERM EXPIRES 1917 TERM EXPIRES 1919

1st Dist., M. R. Wilkinson Oconomowoc 2nd Dist., G. Windesheim - Kenosha TERM EXPIRES 1918

5th Dist., W. F. Zierath - Sheboygan 6th Dist., H. W. Abraham - Appleton TERM EXPIRES 1920

TERM EXPIRES 1921 9th Dist., T. H. Hay - Stevens Point 10th Dist., R. U. Cairns - River Falls TERM EXPIRES 1916

3rd Dist., F. T. Nye - - - Beloit 4th Dist., W. Cunningham - Platteville

7th Dist., Edward Evans - La Crosse 8th Dist., T. J. Redelings - Marinette

11th Dist., J. M. Dodd - Ashland 12th Dist., H. E. Dearholt - Milwaukee

Delegates to American Medical Association

A. H. LEVINGS, Milwaukee

J. F. PEMBER, Janesville **Alternates** 

T. H. HAY, Stevens Point

M. E. CORBETT, Oshkosh

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L. M. WARFIELD, Milwaukee Committee on Arrangements R. W. BLUMENTHAL, Milwaukee, Chairman

NEXT ANNUAL SESSION, MADISON, OCTOBER, 1916.
The Wisconsin Medical Journal, Official Publication

# LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES. County. Ashland-Bayfield-Iron M. S. Hosmer, Ashland, Barron-Polk-Wasbburn-Sawyer-Barnett G, N. Lemmer, Spooner, Calume evanuee C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, Forest Junction, CALUMER C. L. R. McCollium, CALUMER C. L. McCollium, CALUMER LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

# SOCIETY PROCEEDINGS

#### KEWAUNEE COUNTY.

At a meeting of the physicians of Kewaunee County, held on October 22, 1915, at the office of Dr. O. H. Martin at Kewaunee, a county medical society was organized, and the following officers were elected: President, Dr. L. Parson; vice-president, Dr. J. R. Moreaux; secretary, Dr. F. Simon; treasurer, Dr. O. H. Martin; censors, Drs. Bartran, Moreaux and La Fortune.

#### MILWAUKEE MEDICAL SOCIETY

The Medical Society of Milwaukee County met in Walker Hall, at the Auditorium at 8 o'clock. The following were made members of the society: Drs. A. A. Mesck, Saukville; W. P. Miller, M. O. Kagy and George L. Ross.

## MILWAUKEE PHYSICIANS' ASSOCIATION.

The Milwaukee Physicians' Association at its annual meeting and dinner, held on October 17, 1915, elected as president, Dr. F. C. Malone; vice-president, Dr. C. W. Graham; secretary, Dr. S. M. Mollinger.

#### **BOOK REVIEWS**

1914 COLLECTED PAPERS OF THE MAYO CLINIC, Rochester, Minn. Octavo of 814 pages, 349 illustrations. Philadelphia and Lindon. W. B. Saunders Company, 1915. Cloth, \$5.50 net; Half Morocco, \$7.00 net.

The number of papers now being published annually from the Mayo Clinic is suggested by the imposing list of thirty-one contributors which opens the 1914 volume. The variety of the contents is so great that the papers have been grouped under the headings, Alimentary Canal; Urogenital Organs; Ductless Glands; Head, Trunk, and Extremities; Technic; and General Papers.

The volume is of great and varied interest and is splendidly illustrated.

THE CLINICS OF JOHN B. MURPHY, M. D., at Mercy Hospital, Chicago. Volume IV, Numbers I, II, III (1915). Octavo of about 180 pages, many illustrations. Philadelphia and London, W. B. Saunders Company, 1915. Published Bi-Monthly. Price per year, Paper, \$8.00; Cloth, \$12.00.

The next best thing to attending the surgical clinics held by Dr. John B. Murphy at Mercy Hospital, Chicago, is to read the clear and entertaining reports of them given in these volumes, magazine size, published every other month. And one advantage which these reports have over actual attendance at the clinics is that in most instances the latter developments and final outcome of the case is added in order to make the report more instructive and complete.

Reading these volumes as they appear will give an

excellent post-graduate course in surgery to anyone who is not at liberty to get his instruction at first hand.

Progressive Medicine, A Quarterly Digest of Advances, Discoveries and Improvements in the Medical & Surgical Sciences, edited by Hobart Amory Hare, M. D., Professor of Therapeutics, Material Medica, and Diagnosis in the Jefferson Medical College, Philadelphia; Physician to the Jefferson Medical College Hospital; one time Clinical Professor of Diseases of Children in the University of Pennsylvania, member of the Association of American Physicians, etc., assisted by Leighton F. Appleman, M. D., Instructor in Therapeutics, Jefferson Medical College, Philadelphia; Ophthalmologist to the Frederick Douglas Memorial Hospital; Instructor in Ophthalmology, Philadelphia Polyclinic Hospital and College for Graduates in Medicine.

Volume III, Diseases of the Thorax and its Viscera, including the Heart, Lungs, and Blood Vessels, by William Ewart, M. D., F. R. C. P. Dermatology and Syphilis, by William S. Gottheil, M. D., Obstetrics, by Edward P. Davis, M. D., Diseases of the Nervous System, by William G. Spiller M. D. Lea & Febiger, New York. September, 1915.

The great value of this publication is that it gives much more than an abstract of the work done in these departments of medicine during the current year; it presents an appraisal by a competent authority of the year's progress and so economizes the reader's time by presenting for his consideration only what is important, supplemented throughout by judicious editorial comment.

Progressive Medicine is the best sort of a perennial post-graduate course and we hope the number of its readers may steadily increase.

Practical Medicine Series. Vol. III, series 1915, The Eye, Ear, Nose and Throat, edited by Casey A. Wood, C. M., M. D., D. C. L., Albert H. Andrews, M. D., William L. Ballenger, M. D. 369 pages. Price, \$1.50. The Year Book Publishers, 327 So. La Salle Street, Chicago.

Vol. IV. Gynecology, edited by Emilius C. Dudley, A. M., M. D., and Herbert M. Stowe, M. D., Chicago. 224 pages. Price, \$1.35.

Vol. V. Pediatrics, edited by Isaac A. Abt, M. D., Chicago, Orthopedic Surgery, by John Ridlon, A. M., M. D., and Charles A. Parker, M. D., Chicago. 220 pages. Price, \$1.35.

These volumes of a handy size and attractively arranged for the student and busy practitioner, are replete with suggestions of the best practice of the day. The material of the volumes consists almost entirely of abstracts of important recent articles, in each case giving the reference to the original article. The ground is covered with great thoroughness, so that these books present in condensed form what has been done during the year that is really good.

By means of this excellent series of books it is possible for the general practitioner to keep in touch with medical progress in all its directions, an undertaking which the growth of medical literature has rendered an

impossibility without such an aid. The judicious editorship of the entire series and of the individual volumes eliminates most of the superficial and unsound in current medical literature and presents the articles of real value in a form full enough for satisfactory use.

For the busy general practitioner, who desires to keep moving with the current of progress this series will prove most helpful.

The Starvation Treatment of Diabetes, with a series of Graduated Diets as used at the Massachusetts General Hospital, by Lewis Webb Hill, M. D., and Rena S. Eckman (dietitian), with an introduction by Richard C. Cabot, M. D., Publisher, W. M. Leonard, Boston, 1915.

This little volume of 72 pages presents the details of the treatment of diabetes used at the Massachusetts General Hospital in carrying out the "starvation treatment" of diabetes advanced by Dr. Frederick M. Allen of the Rockefeller Institute Hospital. As. Dr. Cabot says in the Introduction, "It is of course too early to say how far-reaching and how permanent the effects of such a diet will be in the severe and in the milder cases of diabetes." But the success which has attended the use of Dr. Allen's methods thus far makes the subject one of extreme interest to every practitioner of medicine.

The details of treatment occupy only a few pages and the remainder of the little volume is occupied by extremely clear and practical tables of diet, carefully graduated for all degrees and for all tastes.

The little book will be found interesting, helpful and practical.

FEDERAL NARCOTIC RECORD BOOK. For Physicians, Dentists and Veterinarians. Published by the Abbott Laboratories, Chicago. Price, 25 cents.

This useful little book contains a brief digest and explanation of the Federal Narcotic Law, a blank form for an inventory of narcotic drugs on hand and blanks for recording narcotics dispensed or distributed.

It is extremely desirable for the members of the medical profession to become intimately acquainted with the provisions of this law and to keep careful records of all narcotic drugs dispensed or distributed in order to avoid the unpleasant consequences which might follow even the unconscious violation of its strict provisions.

A REFERENCE BOOK ON THE FEDERAL NARCOTIC LAW (Harrison Act). For Physicians, Druggists, Dentists and Veterinarians, by Albert Dean Currier of the Chicago Bar and Daniel R. Forbes, late with U. S. Board of Food and Drug Inspection. 137 South La Salle Street, Chicago.

This timely little pamphlet has been prepared to supply the demands for information in regard to the Federal Narcotic Law.

Owing to the heavy penalties for violation of this measure, the many restrictions upon the traffic in these drugs, and the fact that those who are most concerned with the provisions of the regulations of the law are not generally trained in the interpretation of the statutes, there is a pressing need for a short, concise reference book to which the busy dealer or professional man may quickly turn for information and guidance.

THE PRINCIPLES OF PATHOLOGIC HISTOLOGY. By F. B. Mallory, M. D., Associate Professor of Pathology, Harvard Medical School, Pathologist to the Boston City Hospital. Octavo of 662 pages with 497 figures containing 683 illustrations, 124 in colors, and all but two original. W. B. Saunders Co., Philadelphia and London, 1915.

Those who are familiar with the well-known work on Pathological Technique by Mallory and Wright will welcome with enthusiasm the new volume on the Principles of Pathologic Histology by Dr. Frank B. Mallory, Associate Professor of Pathology, Harvard Medical School, and Pathologist to the Boston City Hospital.

As the author states in the preface: "the aim constantly in mind has been to present the subject biologically first by ascertaining so far as possible the cellular elements out of which the various lesions are built up, and then by tracing the development of the lesions from the simplest to the most complex."

The wealth of material at the disposal of the author has enabled him to present the subject in this manner with the utmost clearness and to illustrate the changes which he is describing with a remarkable collection of illustrations, 497 in number, which form the best series of illustrations the reviewer has ever had the pleasure of seeing in a work on this subject.

The work is one which we can heartily commend to practitioners of medicine as well as to medical students.

WHAT TO EAT AND WHY. By G. Carroll Smith, M. D., of Boston, Mass. Second edition, thoroughly revised. Octavo of 377 pages. Philadelphia and London. W. B. Saunders Company, 1915. Cloth, \$2.50 net.

In the second edition of Dr. Smith's book, he has made some few additions and corrections which were found to be necessary. The general plan remains the same. He begins with a general introduction. There are then chapters on Exercise, Obesity, Emaciation. The general constitutional diseases are next taken up. After that, the diet in diseases affecting the various organs. The only infectious fever about which much is said is typhoid fever.

We do not agree with him in regard to the use of purgatives or of diet in general. It seems to us to be proven that a high caloric diet is the best. To our mind, the administration of opium in meteorism is pernicious practice. It may completely mask all symptoms of perforation. Moreover, if typhoids are fed correctly, there is never any meteorism. We affirm this from personal experience.

We doubt if a diabetic could be made sugar-free by following the directions given in the text. There is nothing said about the method of Allen. This seems to promise better results than any treatment hitherto described. Possibly the Author did not think that it was sufficiently important to include it in his book.

On the whole, the book is a fair but brief presentation of the subjects of What to Eat and Why. Why to Eat, Why We Eat, or Why We Eat What We Do Eat? We cannot agree to a total disregard of good English for the sake of a catchy phrase. The book is well printed. Marginal headings help to find a desired paragraph readily.

# The Wisconsin Medical Journal

Volume XIV

MILWAUKEE, DECEMBER, 1915

Number 7

#### ORIGINAL ARTICLES

THE WORKMEN'S COMPENSATION ACT OF WISCONSIN FROM THE VIEW-POINT OF THE INSURANCE COM-PANIES.\*

BY A. B. ROSENBERRY, M. D.,

MEDICAL DIRECTOR, GREAT NORTHERN LIFE INS. CO. OF WAUSAU, WIS.

MEDICAL DIRECTOR, EMPLOYERS' MUTUAL LIABILITY INSUR-ANCE CO. OF WAUSAU, WIS.

WAUSAU, WIS.

The cost of medical and surgical aid has been a disturbing factor in the solution of the problem which Workmen's Compensation has thrust upon the employer of this state.

Briefly, the employer accepting the provisions of the Act becomes liable:

1. For the reasonable cost of medical, surgical and hospital treatment to the injured employees, with medicines and appliances for a period not exceeding 90 days.

The reasonable cost of such medical, and surgical treatment is construed to mean, such a charge as the attending physician would impose upon the injured employee if such employee were himself to pay the bill.

The Commission has held that while the employer holds himself ready to furnish necessary medical, surgical and hospital attendance, the employee must accept such attendance, and if he desires other service he must secure it at his own expense.

2. The employer is liable for 65% of the aver-

age weekly earnings of the injured employee during

\*Read in a Symposium on Accident Surgery and Workmen's Compensation at the 69th Meeting of the Wisconsin State Medical Society, Milwaukee, Oct. 6-8, 1915.

total disability—based on a minimum annual wage of \$350 and a maximum of \$750; provided that if the injured employee after 90 days, is so totally disabled or helpless as to require the assistance of a nurse, the weekly indemnity during such period of total disability is increased to 100% of such average weekly earnings.

3. The employer is liable for 65% of such weekly loss in wages in cases where the accident caused such partial disability resulting in a loss of the wage earning capacity of the employee. The employer is not liable for the first week unless the injured employee is disabled for a period of twenty-eight days.

When death results from the accident and the deceased employee leaves a person or persons wholly dependent upon him for support the death benefit shall be equal to four times such average annual earnings. For a permanent total disability the compensation shall be not to exceed six times such average earnings. Instead of weekly indemnity in certain cases or loss of members, a schedule of specific indemnity is provided; 65% of the average weekly earnings named in the schedule. For example, loss of arm near shoulder, 240 weeks; loss of hand, 160 weeks; loss of thumb at distal joint, 20 weeks.

While the medical man should inform himself of the general provisions of the Wisconsin Compensation Act, as a physician, he is specially interested in the provision regarding the medical and surgical aid feature of the law and it is this especially, which at this meeting is the real subject for consideration and discussion. This is of special importance because of the amendment of the law at the recent session of the Legislature—Chapter 241, Laws of 1915, Section 2394-15-2, which reads as follows:

"The Industrial Commission shall have jurisdiction to pass upon the reasonableness of medical and hospital bills in all cases of dispute where compensation is paid, in the same manner and to the same effect as it passes upon compensation."

In all states and in all countries where Workmen's Compensation laws have been enacted, the eost of the medical and surgical aid features has been one of the important factors in the successful working out of the law, and the cost of this feature and the satisfactory adjustment has been a serious problem.

#### WHAT IS AN ACCIDENT?

An accident may be defined as an event that takes place without one's foresight or expectation; or an undesigned, sudden and unexpected event; specifically here an undesigned and unforseen occurrence of an afflictive or unfortunate character.

An accident eannot take place gradually. must be the result of a sudden unforscen event. The eonsequences of an accident may be gradual; the freezing of a member may or may not be eompensatory, depending entirely upon the eonditions; if the employee is working in such a location as to permit him to seek shelter and he fails to do so, and freezes a member, he should not be entitled to compensation. On the other hand, if the place of employment is such as to make it impossible to seek shelter and protect himself, then such employee should be compensated, as it is the duty of the employer under the law to provide a safe place of employment. Freezing of itself, however, not being a sudden, unforseen contingency and being a eondition arising gradually cannot of itself be considered an accident; it must be eoupled with conditions which make it impossible for the employee to have protected himself from such an occurrence in order to be compensatable.

In this connection the question also arises to what extent the employer assumes liability when there is a predisposition or a pre-existing disease. The determination of this question under the law is of the greatest importance to the employer and the insurance eompany as a matter of cost and of importance to the medical profession, for the reason that, if it be held that the employer is dealing only with the average and not selected lives, it will mean that the employer and insurance eompany will safeguard themselves by the requirement of a physical examination before employment and periodical examinations of employees: and this would open a new field for the medical man.

It would however, be a matter of regret if such physical examinations prior to employment or periodical examinations during employment became the rule. In England it has already been demonstrated that Workmen's Compensation more than anything else in recent years has forced men between 50 and 70 years of age into the worklouse. Add to this the examination requirement and you eliminate the defectives and throw these among the body of unemployed to be supported and taken eare of by the public.

An employee receives an injury to a bone or joint, or a mere abrasion of the skin, which under ordinary healthy conditions would require little treatment and a few days loss of time; the employee however, is suffering from a tuberculous infection which prolongs the disability, or there may be a pre-existing arterio-sclerosis and as a result of a slight injury the employee suffers a cerebral hemorrhage followed by paralysis or death—but for such pre-existing condition the employee would not have sustained such loss of time as to entitle him to compensation. The pre-existing condition, however, places the employee under long continued disability for which compensation is applied for under the Compensation Act.

An employee has varicose veins which, as a result of a slight contusion or abrasion of the skin, is followed by an uleer which may disable him for weeks or months. Again, many cases are reported to insurance companies as strained back, wrenched back, etc.; now we all know that a majority of these cases are purely cases of lumbago, or museular rheumatism, as it is sometimes ealled, which is not the result of an accident, but a neuritis of the sensory nerves in the museles.

Then we have the question of hernia as a serious difference between the insurance company, or the employer and the employee, the doctor, and often the Industrial Commission; and right here the fact is too often ignored that hernia is a disease which ordinarily develops gradually and very rarely is a result of an aecident. Should the employer in these eases be liable for compensation and is the attending physician or surgeon justified in looking to the employer or the insurance company for his fees instead of to the employee?

Then there are the differences arising between the employer or the insurance company and the physician or surgeon and the employee as to the cost of medical and surgical aid. Everywhere this has been an aggravating problem, and in many cases cause for complaint has been justified, as is evidenced by the enactment of just such laws as Chapter 241 empowering the Industrial Commission to pass upon the reasonableness of such charges.

These I believe are the important questions for the consideration of the medical man and of this society, and in order to give to the members a broader view of the treatment and consideration given these problems by the Industrial Commissions of the various states I formulated a series of questions and submitted them to the Commissions of the different states and the replies received are herein incorporated, viz.:

Question 1. Has the Commission of your state authority to pass upon medical and surgical aid bills so as to protect employers and insurance companies from excessive charges under the Workmen's Compensation Act?

The Ohio Michigan, Connecticut, West Virginia and Nevada Commissions replied that they have such authority, while California and Oregon exercise such authority without any specific law; the state of Washington provides for no medical attendance cost.

Question 2. Has there been any difficulty or complaint in your state that physicians were making excessive charges or giving more treatments or dressings than they would give or charge patients in regular practice?

# California replies:

"There is a tendency on the part of a certain class of practitioners to pad their bills by making extraordinary number of visits or observations of the case and charging therefor the schedule fee. It is the opinion of the Commission that reasonable care provided for under the law involves just the character of care that an individual similarly situated would receive if injured, and not a subject of the compensation law. The Commission has had occasion to cut bills because of extraordinary amount of attention which could not be proven to be necessary by the character of the case."

# Oregon replies:

"While in a number of instances facts seem to indicate that some surgeons are giving more treatments and dressings to injured workmen than they would have given to patients in regular practice, the fact that the Commission notifies the employer of every expenditure made on account of injuries

to his workmen, has resulted, in several instances, in the work being given to other physicians."

Ohio replies:

"To a limited extent, less so we believe than under any other compensation act for the reason that the Ohio Act goes further into the question of medical attention than most any other Compensation Act. Full charge of this subject is taken by the Industrial Commission. To be definite we would state that the complaints are few and getting less, owing to the fact that we arbitrarily estimate first aid according to a fee bill as a guide and from the description of the nature and extent of the injury and necessary after-treatment, using the physician's report and probably a report from our local examiner or special examiner as a checkingup system. Physicians therefore understand that inasmuch as the employer and employee both are informed as to the amount of medical compensation paid out and that they are very likely to comparc notes, and often do, and further because they know of our fee bill schedule which we use as a guide and the manner in which we estimate after attention, they no doubt consider it useless to attempt to make excessive charges and give more treatments and dressings than are necessary. In fact, if this were shown to be their regular routine charge, eventually it would be shown that it would operate to lessen the amount of industrial accident work that they could expect."

# Connecticut replies:

"Frequent complaints have been made along the line indicated. Our practice is, whenever a complaint is made to put the matter down for a hearing, receive such proper evidence as may be offered, and decide whether or not the bill is correct in point of fact."

# Nevada replies:

"In our state it is a direct obligation upon the employer to furnish necessary medical aid and attention, and the physician is generally engaged by the employer. It sometimes happens that the employee prefers the services of his own family physician. In that case, such service is obtained at the *employee's* expense."

# West Virginia replies:

"Very little complaint is made of excessive

charges owing to the fact that we did create a schedule."

In Michigan the situation may be stated by a quotation from an editorial published in the state organ of the Medical Society, as follows:

"Complaints are already being filed with the Industrial Commission direct in Lansing that the amount of money paid to the physicians in the state exceeds that of the amount paid to the injured employees. So persistent are these complaints and so frequent are the physician's exorbitant fees called to the attention of the Board that its members are already seriously considering the advisability of adopting a schedule of fees covering the services of physicians in Michigan." (A schedule was later adopted.)

In our own state, the Wisconsin Industrial Commission says:

"There is reason to believe, that medical services in this state is costing too much. The Commission's records indicate that physicians and hospitals received over \$400,000 for services rendered under the Compensation Act during the last fiscal year, June 30, 1915. This is nearly one-half of the total amount paid directly to injured workmen and their families. It is probable that the Compensation Act has very greatly increased the income of the medical profession as a whole. Hundreds of serious injuries which doctors formerly treated on a charity basis are now paid cases. This is as it should be. The medical profession ought not to be called upon to take care of injured workmen for less than the service is fairly worth. On the other hand, since the pay is certain and the numher of eases large, the fees should not be exorbitant. A greater number of physicians, including the recognized leaders of their profession, have shown a spirit of co-operation and have rendered highly skilled service at very moderate cost. Some, however, have been disposed to feel that the employer or the insurance company is rich and to render bills based upon that assumption. Chapter 241 of the Laws of 1915 gives the Commission power to pass upon the reasonableness of medical and hospital bills in disputed cases. It is hoped that a basis of charge can be agreed upon which will be fair to all parties concerned."

Question 3. Has your Commission held, or

would you hold, that the employer is liable for compensation where the injury is aggravated and prolonged by reason of some latent defect or disease or predisposing cause? For example: A syphlitic or one suffering from a tuberculous infection receives a slight injury, which in a healthy person would call for but little treatment and cause very temporary disability, but with such latent defect aggravated by the slight injury the injured person is disabled for a long period of time—would the employer, under your law, or the rulings of your Board be held for compensation during the whole period of disability?

# Michigan replies:

"In the matter of latent defect or disease of the injured employee, the Board has taken the position that they are dealing with the ordinary individual not the physically perfect."

# California replies:

"The Industrial Accident Commission has taken the stand in several cases which come under the description in your letter—'that a chronic disease already present, contributing to a disability long after the injury which produced incapacitation may have subsided,—shall not exact indemnity of the employer.' In the case of leg ulcer precipitated by a trivial cause, and continued through presence of varicose veins, the Commission has taken the stand that compensation and medical treatment should be commensurate with the original trivial injury only. In an instance where syphilis has prolonged disability through producing non-union of bone, the Commission has held that compensation was due the injured working man, for an injury of this type, for an average course of healing. The injured received no compensation for the injury as prolonged by the general disease."

## Nevada replies:

"As a general rule, yes; it being understood however, that the Commission is reluctant to lay down any fixed rule which will have general application. Briefly, and in a general way the position of the Commission is this: a pre-existing ailment which causes no incapacity by itself but aggravated by an injury received in the course of employment, thereby causing incapacity, such incapacity would be considered compensatory, and the injury as the

proximate cause of the disability. The Commission holds that where the physiological balance is disturbed, and thereby the vitality lowered and power of resistance impaired, if an attack of germ disease follows, or a dormant lesion is lighted up (which otherwise might not have affected the injured person for years) the consequences must be regarded as a disability due to a personal injury arising out of and in the course of employment. The Commission is inclined to follow the rulings to the effect that a compensation law deals with the average man and not the physically perfect man; also that the compensation applies to all employees without regard to their physical condition—the weak as well as the strong."

# Connecticut replies:

"That if by some injury due to the hazard of the occupation one in an impaired physical condition suffers certain results, he recovers the compensation which those results call for, disregarding the fact that in one of a different physical condition those results might not have followed. There are obvious limitations to this rule—for instance, the other day a man brought in a claim for an injury which resulted in localizing rheumatism already in his system. There was no clean-cut accident, but he was put at work which required the exercise of certain muscles in a way which would not have hurt a normal person. Furthermore, the evidence showed that this localization of the trouble might have occurred through playing golf or in any one of a hundred other ways. In that case the claim was dismissed on the ground that there was no real connection between any exertion which the work required and the results which followed, and that, while the result occurred in the course of his work, it was not one which in any fair sense resulted from doing the work, but happened as a result of a hazard of living."

# Ohio replies:

"Our Commission has held in practically the same manner as all Commissions, that it is necessary to consider the employer liable for compensation when an injury is aggravated or prolonged by pre-existing or subsequent disease. We believe that you will find, after a thorough investigation of decisions under workmen's compensation, that in these cases each case must be considered a case in itself, and that in many it is necessary to deter-

mine as to when the disability the result of the injury has ceased, and when the disability the result of the disease must be considered to begin. Everything, in our opinion, in a case of this character depends upon the history of the case and the relationship that exists between the cause and effect. For instance, if it is definitely shown in a syphilitic case that the man sustains a fracture at the knee joint and that a Charcot's joint develops at this point, we feel that the disability the result of the injury has ceased and we believe that there is such a relationship between the cause and effect that the Charcot's joint would have to be considered as being caused or hastened in its formation by the fracture. However, if this same man had symptoms showing syphilitic disease of the nervous system and an attempt was made to show that this was aggravated by the injury to the knee, we believe there would be absolutely no relation between the cause and the effect. In many other cases we appreciate that it is necessary to determine that after such a time the disability as a result of the injury ceases and that the present disability is due to a pre-existing or subsequent disease. It is impossible for us to appreciate how these cases could be considered by an arbitrary ruling of any kind, and it is our opinion that they will never be able to be considered in any other manner except as individual cases depending upon the history, etc."

# Oregon replies:

"In one syphilitic case the Commission discontinued payments because of the condition that existed prior to the injury. There have been no other cases during the year where payments have been discontinued or refused because of pre-existing conditions."

Question 4. If there have been complaints of excessive charges on the part of physicians, is it not true that the reason for such excessive charges was due to numerous or unnecessary treatments or dressings rather than that the charges for such services were based upon some state or local medical society fee bill?

# New Jersey replies:

"Complaints due to numerous or unnecessary treatments and dressings and not to the charges based on medical society fee bill."

Ohio, West Virginia, Connecticut, Nevada, California and Michigan give the same answer.

In Wisconsin the numerous and unnecessary treatments and dressings have been the chief source of complaint.

Question 5. Has there been any effort or discussion in your state either by law or rule of the State Board or Commission, to adopt a state medical fee bill?

# Connecticut replies:

"We have not regarded the scheme of a state medical fee bill as being practical."

# Oregon replies:

"With the co-operation of the state medical society a tentative fee schedule has been prepared and this schedule adopted by the Commission. This schedule has been adhered to with the exception of those instances where the individual cases indicate that the services rendered by the surgeon warrant payment of fees larger than those named in the schedule."

# Michigan replies:

"The Michigan State Medical Association has issued a schedule which is accepted as fair and just."

# California replies:

"That when the Act went into effect, a fee schedule was adopted and presented to the Industrial Accident Commission and was approved by them. This fee schedule was somewhat larger in scope and in fees than the schedule in use at that time by the private casualty companies. The schedule was met with antagonism by the organized medical profession in its various units but in April, 1914, it was presented to the State Medical Society meeting and the State Medical Society adopted the fee schedule as approved by the Commission. When it became apparent to the profession, what was the attitude of the Commission, and the character of the people. service to whom the schedule covered, it was accepted. This schedule was later adopted by almost all of the County units in California, so that the profession is in close accord with the Industrial Accident Commission, and wherever expression of opinion is voluntary, believes that the fees are reasonable for the character of services. Our fee schedule provides that the

fees therein contained constitute the minimum fees and that any service more than ordinary shall warrant a fee in excess of the schedule, if proper representation of the fact is made."

# Nevada replies:

"This matter has been taken up several times with the State Medical Board, requesting said Board to agree on a schedule of fees. This matter has been considered many times, but it seems to be the consensus of the State Medical Association that it is inadvisable for said association to put its stamp of approval on any schedule of fees."

# Ohio replies:

"In our opinion, the physicians in this state would not attempt to adopt the state medical fee bill as they feel that our present method is more satisfactory. In fact, we obtain the active cooperation of practically all physicians to such an extent at this time that we have a great number of cases of exaggeration and malingering that are actually reported by attending physicians."

There is a class of cases reported as injuries which do not appear to be the results of accidents but might rather be called an occupational disease. I refer to what is commonly called teno-synovitis on the radial side of the wrist in which there is a distinct crepitus and considerable swelling over the tendons.

On Hernia the Industrial Commission of Ohio has laid down three rules on the subject for the information of both employer and employee, in accordance with the medical facts, which should be followed here:

"Rule 1. Real traumatic hernia, namely, that produced by a force great enough, that when directly applied to the abdominal wall, results in either puncturing or tearing the wall asunder, full disability as approved by the Statute, will be allowed."

"Rule 2. All other hernias, whenever occurring, or discovered and whatsoever the cause, except as under Rule 1. are considered to be discases causing incapacitating conditions, or permanent partial disability, but the permanent partial disability and the causes of such, are considered to be as shown by medical facts, to have either existed from birth, or have been years in

formation and duration, or both; and are not compensatable except as provided under Rule 3."

"Rule 3. All cases coming under Rule 2, in which it can be conclusively proven, first:

That the immediate cause which calls attention to the hernia present was such as a sudden effort, severe strain or bruise. Second: That the descent of the hernia occurred immediately following the cause. Third: That the cause was accompanied or immediately followed by severe pain in the hernial region. Fourth: That the above facts were of such severity that the same were noticed and communicated immediately to one or more persons. These cases are considered aggravations of previous ailments or diseases and will be compensated as such for time loss only and to a limited extent, depending on the nature of the proof submitted and the result of the local medical examination. A reasonable amount will also be allowed for a properly fitted truss." (As I understand this the employer is not liable for operation.)

The Insurance Company stands in the place of the employer under the Act and takes care of all reasonable expenses arising from accidental injuries. The expenses fall under the following heads:

- 1. Medical and surgical aid.
- 2. Hospital care—medicines and appliances.

#### 3. COMPENSATION.

Medical and Surgical Aid. The Company pays "for the reasonable cost of medical, surgical and hospital treatment of the injured employee." Now a good deal depends upon the point of view as to what is reasonable. The attending surgeon may think he is the sole judge of what is reasonable, and the auditor of the Insurance Company may feel that he is in the same position; but it must be admitted that the Insurance Company has a right to have a voice in the matter. One Railroad Company in this state embodies in the contract with the Company's Surgeon this condition, "it will pay reasonable compensation for services rendered in personal injuries and like cases placed in your charge but reserves the right to determine, by its general Adjuster, the amount your compensation." It may be said that in our profession the large majority of the surgeons doing

work for our Company are in full sympathy with the Act and co-operate to the best of their ability with the Insurance Company. It must be admitted, however, on the other hand that there are some who do not appear to take this position. We think that some of the surgeons make bills for services out of proportion to the extent of the injuries and services rendered. They do this in two ways. First by making high charges and second by making many dressings or treatments. It is our contention that aseptic wounds should not be frequently dressed and the purpose of the first dressing is to render the wound aseptic and repair the injury. The chief factor to medical cost is still infection. If at the first dressing the wound is not rendered aseptic then the Doctor has failed in his chief object of the first attention. There is no doubt we have too many cases of infection. In Ohio the Commission is of the opinion that 50% of the cases of infection are due to lack of proper treatment rendered to the injured. We urge our surgeons to instruct employers or those acting for them in the proper method of rendering the wounds aseptic while waiting for medical aid. In most mills and factories special aid kits have been installed. As an example of what can be done by prompt attention and rendering wounds aseptic immediately, it is stated that the United States Steel Corporation has only one case of infection in 1,000 injuries. As a rule the dressing need not be changed until you believe the aseptic wound to be healed. There are perhaps five indications for change of dressing before the wound is healed:

- 1. When rubber drainage tubes need to be removed;
- 2. When troublesome secondary hemorrhage occurs;
- 3. When the operation has not been done aseptically and the high temperature indicates infection;
- 4. When plastic operations or other supplementary work must be done;
- 5. When the Surgeon's curiosity becomes uncontrollable.

It has been the experience in the present European war that aseptic wounds do best with abstention from operation and infrequent dressing. What can be gained by dressing an asptic wound every day or even every second day? If it is already aseptic we cannot make it any more so and by frequent changes the wound may become infected because every time it is exposed there is danger of infection from a fault in the technique. At any rate we may disturb the parts and delay the healing process. Let us then have fewer changes and no unnecessary interference with wounds which are aseptic. Do not misunderstand me. I do not mean to intimate that Doctors make frequent dressings to pay up their bills but I think they do it more from force of habit.

Now in hospital charges, what is reasonable? Is it reasonable to keep a man in a hospital thirty days on account of a sprained ankle or because he has lost the tip of his thumb, or is it reasonable to put a working man, who would choose a ward bed if he were paying the bill, in a room costing from \$15.00 to \$20.00 per week? An injured man should be considered a hospital ease when he requires the *services of a nurse*. The seriously injured should have private rooms if the attending surgeon thinks the case requires it, but in ease of an amputation or fracture a ward bed should be used.

As the Doctor is employed by the Insurance Company or the employer he should use his influence with his patient to get him back to work as soon as possible. If he cannot do the work he is accustomed to he may be able to do lighter work at a lower wage and in that case will receive compensation based upon a difference in the average wage of his regular occupation and the wages he would receive at other work which he could do in his partially disabled condition.

The Wisconsin Act is more liberal with the Doctors than the majority of the states that have compensation laws and in order to show this I will give you the following figures. Some 35 states have Acts which provide for medical and surgical aid to some extent. In Wisconsin the time limit is 90 days but there is no limit to the charge which the attending surgeon can make, except the requirement that such charges shall be reasonable. One state provides medical and surgical aid for 8 weeks; two states provide for medical and surgical aid for thirty days. Michigan and Nebraska furnish medical and surgical aid for three weeks. One state for 60 days; another state for 15 days and Nevada furnishes medical and surgical aid for four months. Ten states furnish medical and surgical aid for two weeks. Minnesota, Wisconsin and California furnish medical and surgical aid for 90 days. In 17 states the amount of liability for medical and surgical aid is limited. This limit varies from \$25.00 to \$300.00. About one-third of the 17 states limit the liability for medical and surgical aid to \$100.00. The state of Washington has a compensation act which does not require payment for medical and surgical aid.

In conclusion let me say this: the insurance eompany has no quarrel with any Fee Bill the Wisconsin State Medical Society may approve or promulgate. Differences, when they do arise between the attending surgeon and the company are almost exclusively confined to unnecessary and prolonged treatments. The better the man, the fewer are the differences; high class service is always the best for the injured and most economical for the company.

# THE RELATION OF THE PHYSICIAN TO COMPENSATION.\*

BY HON. CHAS. H. CROWNHART.

RETIRING CHAIRMAN WISCONSIN INDUSTRIAL COMMISSION,
MADISON, WIS.

The compensation act became a law in 1911. Broadly speaking, it is the greatest piece of humane legislation ever enacted in this state. Now twenty-five other states have compensation laws, none better, many not so good, as the Wisconsin law. To secure this law the legal profession made a great sacrifice without a murmur unless a very loud howl from a few shysters with their "runners in" can be said to murmur. Where the lawvers lost, the doctors gained; and the injured workmen gained. The workmen gained by having better medical and hospital attendance furnished them at the expense of the employer; they have received at least four times the amount in cash compensation as they formerly received as damages. To secure the success of this law, many factors have been essential:

Employers had to be educated to its beneficent purposes and its ultimate benefit to them,

Insurance companies have had to be educated by experience that there had come the dawn of a new

<sup>\*</sup>Read in Symposium on Accident Surgery and Workmen's Compensation at the 69th Annual Meeting of the Wisconsin State Medical Society, Milwaukee, Oct. 6-8, 1915.

day and that instead of their coming to the workman as harbingers of disaster, they were to become his friend; that instead of their being the enemies of mankind they really had a mission to perform, and

The doctors, lawyers and judges were required to co-operate to get the best results.

The law has been a success—a great success. Yet the scheme of workmen's relief is in its infancy. Its scope will be enlarged until sick benefits, maternity benefits and old age pensions for the indigent workmen will be considered as a public investment instead of a public tax. These things are not new and untried; they are and have long been in practical effect in the most efficient and virile country in the world, and they have been potent factors in that country's efficiency and prosperity.

As these humane steps are taken, the doctors of medicine will become more and more the agency of administration of the system and they will share directly in the benefits. Medical men should study the principles of these public policies and should help build up the intelligent public sentiment that is necessary to precede enactment of any good law.

## RELATION OF DOCTOR TO EMPLOYER.

The act of 1911 provides that the employer shall furnish his injured workmen the necessary medical attendance to cure and relieve during the ninety days immediately following the injury. supreme court by construction modified the law so as to require such medical attention only when the injured employee requested it of the employer. The Industrial Commission induced employers to ignore the court decision and to tender medical services as soon as they knew of the need; and the legislature amended the law at its first opportunity to avoid the court's construction. Credit is to be given to the employers for helping to amend the law to keep it efficient and within the intent of its framers. You men know how fruitless and absurd it is as a matter of practice to require the injured man to request his employer to furnish him a doctor before he is entitled to treatment. It is like calling up the mayor to request that he send the fire department in case of fire. Injury by accident, like fire by accident, needs prompt treatment.

So, in case of a work accident to his workman, the employer furnishes the physician. This is his duty, but he has the right of selection of the physician, if he is to be held to pay the bills. This is a valuable right that is essential to the success of the act. However, it furnishes a source of contention which doctors have frequently helped to foster and which they can do much to allay.

It would seem that doctors should accept the principles of the law and good-naturedly help to carry out its provisions. In one case a doctor may lose a patient but he will make up for it in another case.

How does the fact that the employer hires the doctor, change, if at all, the doctor's relation to his patient? The commission has ruled that the doctor should maintain toward the "compensation patient" exactly the same confidential relation that is vouchsafed to any other patient. In no case is he to be a spy for the employer, or to betray the confidences of the injured man. The employer is concerned in having his man get well at the earliest possible time-but the patient is likewise concerned. Here the doctor's duty corresponds to his fealty to both client and patient. But under no circumstances should the doctor forget his cthical relation to his patient. He is a messenger of mercy and father confessor as well. Some insurance adjusters have been bold enough to suggest to their doctors the treatment to be followed. For instance, amputation might be considered preferable to prolonged treatment to save a member, because cheaper. No adjuster should be bold enough to offer such a suggestion to a real doctor more than once. No greater insult could be offered to an honorable physician. The employer or the adjuster has nothing to say whatever as to the kind of treatment the patient is to receive,—that is the province of the law and of the doctor. Some employers and adjusters seem to feel that the attending physician is a sort of expert witness for them and I am sorry to say that some doctors seem to agree. None of the expert service that disgraces all professions in court, is to be tolerated in compensation cases.

#### EVIDENCE AT HEARING BEFORE THE COMMISSION.

The law as to cases in court prevents physicians from testifying against their patients. Under the compensation act, the rule has been modified requiring the doctor to testify when ordered by the commission. The modification of the rule was necessary in the interest of all parties. The physician who knows most about the injured man

should advise with all parties in order that compensation may be paid promptly and fully, but the principle underlying the old statute should be preserved in its integrity. The sick man should have full confidence in his physician and feel free to tell all he knows about his case to his medical adviser. The doctor should faithfully maintain his fidelity to his patient until required to give evidence by the commission, and then to volunteer nothing that in his judgment would be unethical without submitting to the commission's ruling. I wish to impress this upon the profession. cannot maintain a proper relation to the injured man unless you are his friend and confidant. You cannot secure the confidence of the workmen at large if it becomes known that you appear at hearings as a partisan against them. There is frequent abuse of the relation of physician to patient, by physicians who are paid annual retainers or whose practice comes solely or largely from one concern. In such cases the employer and physician should have an early agreement as to what the duty of the physician is in the premises. injured workman may not suffer loss of compensation by reason of his doctor advocating the cause of his employer or the insurance company. commission gives his testimony about as much weight as it is entitled to. But the injured man suffers in his feelings; he feels outraged, and he carries his grievance to other workmen who are quick to resent the injustice.

#### REPORTS TO EMPLOYERS AND TO THE COMMISSION.

The doctor is an agent upon whose report compensation is paid. He cannot become a party to a fraud; and he should not certify compensation to be paid unless he thinks it honestly due the workman. When in doubt he should express his judgment candidly to both his patient and his employer and leave it for them to settle through the commission, if necessary. By failure to make prompt reports to the employer or insurance carrier, the physician causes delay in payment of compensation. A little more attention to details will hasten adjustment of claims and prevent a great amount of correspondence.

#### TESTIMONY BEFORE THE COMMISSION.

If doctors will remember that the commission is listening every day to their evidence, they will give the commission credit for knowing some of the more elementary things about surgery, and not insist on going into great detail unless so requested.

Simpler language will often please the reporters and make the evidence partially intelligible to the layman who may be interested. Testifying in an assault case in an English court, a young doctor said: "I discovered considerable ecchymosis under the left orbit caused by extravasation of blood under the cuticle."

The Court: I suppose you mean the man had a black eye.

The Witness: Precisely, my lord.

#### RELATION TO LAWYERS.

Bearing in mind that the attending physician is not to be treated as an expert witness for or against his patient, the physician has little excuse to closet with lawyers. Lawyers know the law and they know how to secure evidence of experts without suggesting a violation of professional ethics.

#### PROFESSIONAL ETHICS OF DOCTORS.

It would be a source of amusement if the consequence were not so tragic to patients and friends, to see the doctors quarreling over a patient. Naturally, the patient prefers his family doctor, if he has one. But the family doctor should know the law and should explain to his patient that hecan attend at the expense of the employer only when so requested by the employer. The injured man may select his own physician, but if he does so without his employer's consent, he must foot the bill himself. For this reason the physician called, if he is not the physician of the employer, should explain the law to the patient as soon as proper, and he might add in truth generally that the company doctor is a good doctor, equally as capable as himself. On the other hand, where the injured man desires his family physician to attend him or that he be taken into consultation, the doctor furnished by the employer may well suggest to the employer that the change be made. A little more consideration of the patient's feelings will frequently avoid malingering or neurasthenia.

We frequently find a sort of a callous feeling growing up toward the injured workmen by doctors, adjusters and employers, that bodes no good in the administration of the law. The injured man may be a "hunkie", a "dago", a "wap". He may be poor and ignorant; he may be unclean. Such as these are found doing the work necessary

for our wants and our luxuries. Yet have these men love of life; nerves to feel pain; capacity to suffer. The employer has taken them into service; and the same law—the same measure of care—protects and ministers unto them as to others more fortunately situated.

#### MALINGERING.

The true malingerer is a fraud. He knowingly attempts to deceive in order to get that which is not due him. He must be rooted out whenever and wherever found. But we know that it is not easy to determine as a fact that a patient is a real malingerer. The commission has learned this to its sorrow. It has found through subsequent events that patients it had believed malingerers were in fact sufferers from painful disease. This has not happened frequently, but it has happened. In nearly every case the commission has been able to grant relief but in some cases the statute of limitations prevented giving relief.

The physician must in a large measure solve the problems of malingering. He must study his case and be able to determine the truth. He is a bold man that will try to deceive his doctor if the doctor knows his business and knows his man. Malingering is not frequent—nervous troubles are frequent. In the nervous class the doctors meet all too frequently with failure. This is your problem; the layman may not suggest a remedy.

# MALPRACTICE.

Malpractice is not uncommon if you consider as malpractice every departure from good practice. Suits for malpractice are the constant fear of some physicians and a real danger to all physicians. The science of medicine and surgery is not an exact science. A certain per cent, of failure is bound to come. However, the commission has found many bad results which might have been prevented by proper care. What is its duty in such cases? Manifestly, the commission must see that the mandate of the law is obeyed, for the injured man, under the law, is entitled to the necessary treatment to cure and relieve. This mandate cannot be satisfied with anything less, if cure and relief can be had. The commission has exercised its powers to secure advice of its own selection in such cases to check up, and when necessary, to order other treatment. The commission never has advised or encouraged a suit for malpractice. It feels that the employer, for his own protection, must employ a good physician to attend his injured employes. It feels that doctors who do not come up to the standard will be and should be weeded out and not allowed in compensation cases. The Industrial Commission has had very great help from the medical profession. It has made its rate of remuneration to physicians who advise it very modest but such has been the professional desire to be of service in working out the problems of state that only one surgeon has declined to assist the commission when requested, at the fee so fixed.

#### REMINISCENCE.

Because the science of medicine, like the profession of the law, is not definitely bounded, mistakes of physicians must be treated with great charity. One of the commissioners submitted to a couple of physicians an X-ray of the foot. It so happened that the picture showed only a portion of the bones of the lower leg, making a close resemblance to the heel bone. The doctors examined the picture upside down. Their reading was an awful case of broken-down arch. In one case had before the commission, three eminent doctors found, quite to the satisfaction of the commission, that a workman was suffering from sarcoma of the spleen. However, it appearing that death was near and the patient's doctor being unreasonably stubborn in claiming sarcoma of the kidney the case was held for post mortem, to the utter confusion of the experts for the proof was conclusive of their mistake. It is not always advisable to await the death of the patient to determine what ails him.

In a town dominated largely by one large industry, all doctors but one who entered a very mild protest, pronounced a patient with a broken ankle practically well and ready to return to hard work, when the X-ray showed plainly to the commission ununited fracture of a serious nature. The patient was sent to Milwaukee where a radical operation was performed. The man was fortunately saved from being a cripple all his life. The commission has never expressed an opinion as to whether the experts who testified for the big employer were ignorant of the elements of their profession or thought they were in court, where they were privileged to testify to any old opinion, if they were paid for it. These are but illustrations of some experiences the commission would prefer not to have.

CONTRACTS OF EMPLOYMENT OF PHYSICIANS.

There are various forms of contracts of employment of physicians to render service under the act. Some insurance companies submit a schedule of fees to doctors to be followed; some have hired doctors on percentage of premium income basis; some hire doctors on a yearly salary; in some cases the hospital and physician have a combined contract.

I do not wish to pass on the ethics of the profession in these matters. But I think sound public policy requires that the physician should get the reasonable value of his services in each case; that in every case he should render the character of service required under the law; that there should be nothing in his contract of service that will tend to create a feeling among workmen that his services are less frequent or inferior because of his contract. There should be nothing in the contract that makes the employment of the one physician exclusive in all cases. The employer ought to reserve for himself the right to change physicians in particular cases; to take the injured man's family physician when desirable, or a specialist whenever necessary. Within reason it will pay to consult the injured man as to a choice of physician, especially in cases of nervous disorders. The ideal contract is the implied contract of quantum meruit, reserving the selection in each case from as large a circle of qualified physicians as possible.

#### FEES TO BE CHARGED.

It is a common practice for all professions to charge more or less according to the ability of the client to pay. With compensation the rule ought to be based on what the services of the physician are reasonably worth considering the patient neither poor nor rich. On the final accounting the industry is going to pay compensation bills and distribute the cost over the consumers. The laborer is worthy of his hire but the doctor ought not to make the mistake of thinking he is the only one hurt by the accident. It is only fair to say that the great majority of the better class of physicians have been entirely reasonable in their charges.

#### FINANCIAL ASPECT.

Ultimately the consuming public must pay the greater share of compensation charges. Actually the distribution of cost is somewhat difficult and

often the employer has to pay the cost for some time before be can place it on the consumer. Competition of commercial products between the states and other countries also affects distribution of cost and limits compensation to a large degree to a competitive basis. In other words, generally speaking, a merchant in Wisconsin in competition with a merchant in Chicago will not wish to pay greater compensation than his Illinois competitor. Thus we have a legislative limitation of amount to be granted the injured man. This amount in many cases is too low in Wisconsin and much too low elsewhere. The laws are young and they will improve with age. In Wisconsin, taking the year ending December 31, 1914, as a basis, we find that compensation cost the employers over \$2,200,000. Of this amount the workman or his dependents got about \$800,000 directly in cash payment, and there was paid to hospitals and doctors for their benefit \$400,000. The balance, of \$1,000,000 went to insurance companies for overhead cost or profits.

If we say that \$2,200,000 is about as much of a burden as the industries can stand, let us turn to see if this burden is equitably distributed. know the workman is not geting enough. Will you surrender some of the \$400,000 going to you and to the hospitals? Or should the insurance companies economize and surrender some of the \$1,000,000 they take? Is too much of this fund going to the malingerer or the undeserving? Can a saving be made here so that the deserving man may have a larger measure of justice? Can better results be obtained by physicians after the accident? Are we not having too many deaths from blood poisoning; too many cripples from the same source? Are you not partially to blame? Let us look at this problem of compensation as a great, big, growing problem and give it the attention it demands. No body of men has greater interest in the matter than the physicians—no body of men can do more to make the law a success. Yet some physicians arc often careless or indifferent in their treatment of compensation cases.

I am authorized to say to you for the Industrial Commission as presently and formerly constituted, that great credit should be given to the intelligent co-operation of the physicians and surgeons in making progress with the problems of compensation. The commission desires your active assistance at all times, and in return will give to you that kindly consideration justified by your good deeds.

# TRAUMATIC HERNIA AND TRAUMATIC ORCHITIS IN RELATION TO WORK-MEN'S COMPENSATION.\*

BY A. H. LEVINGS, M. D.,

#### MILWAUKEE.

The usual definition of a hernia is something like the following: the protrusion of any viscus from its natural cavity, through a normal or artificial opening in the parietes.

De Costa describes an abdominal hernia as a protrusion of peritoneum liable to contain, containing at times, or permanently containing, any viscus or part of a viscus from the abdominal cavity. Further on he says a hernia has three parts, the sac, the sac contents and the sac coverings.

Rose and Carlos say, that by the term hernia is meant the protrusion of some viscus from its normal situation through an opening in the walls of the cavity within which it is contained.

Gray defines inguinal hernia as that form of protrusion which makes its way through the abdomen in the inguinal region.

Deaver, in his Snrgical Anatomy says, a hernia is an extrusion of a viscus or part of a viscus into or through the wall of the containing cavity.

William B. Coley describes an abdominal hernia as a protrusion of some one or more of the abdominal viscera through a normal or abnormal opening. He describes a hernia as consisting of three parts, first, the sac; second, the coverings of the sac; and third, the contents of the sac.

The late Roswell Park says, that the term hernia of itself implies protrusion or escape of a contained organ or part through its containing walls, yet covered by some of them.

I think it is of first importance that we decide on a definition of hernia, and also of what a hernia consists of. Is it a protrusion of some viscus, or part of a viscus, from its natural cavity through an opening in the parietes? Is the protrusion a requisite? If one resects two or more ribs and opens the parietal pleura, does that make a hernia of the lung, or does a hernia only occur when the lung protrudes? If there is laceration of the scalp, with comminution and loss of bone, does

that constitute a hernia of the brain, or must the brain protrude? If there is a tear in the diaphragm, does that, of itself, constitute a hernia, or must some viscus have prolapsed through the tear, to constitute a hernia? Does a slit in the cornea constitute a hernia of the iris, or must the iris prolapse through the opening? In the abdomen does the presence of external and internal abdominal rings and an inguinal canal constitute a hernia, or only a predisposition? Go a step further: Does the presence of a congenital process of peritoneum leading down to the testicle or a funicular process which never has contained anything of abdominal contents, constitute an inguinal hernia?

The reduction of a hernia, certainly a common and well-understood expression, means the replacement of the protruding viscus into its normal cavity.

If we accept any other definition of hernia than that it is a protrusion of some viscus from its natural cavity through an opening in the parietes, and that a hernia consist of a sac, sac contents, and, generally, coverings, then the literature of hernia must be rewritten.

If we are in reasonable accord as to what a hernia is, then we may proceed to the discussion of traumatic hernia.

DeCosta says, that the sac of an acquired hernia forms gradually. The sac may exist for years, and yet remain empty. When bowel or omentum enters it from some strain or effort, the parts were long prepared to receive the extruded mass. The extrusion may occur gradually or suddenly. If it occurs suddenly, the sufferer believes that his hernia was formed then and there. In rare cases, tranmatism may cause a hernia immediately, no sac existing before the accident. It does so in the inguinal region by stretching and tearing the internal ring, the inguinal canal at once enlarging. Such a condition is a true traumatic hernia, traumatism being the sole cause and not the exciting cause.

Walter M. Brickner, in the American Journal of Surgery, June, 1915, says: Traumatic abdominal herniae do, of course, occasionally occur as the immediate or remote result of crushing or penetrating injuries to the abdominal wall or diaphragm, but hernia through the umbilical, inguinal and femoral canals are never traumatic, we believe, except in such rare instances in which a penetrating injury may have actually occurred to

<sup>\*</sup>Read in a Symposium on Accident Surgery and Work-men's Compensation at the 69th Annual Meeting of the Wisconsin State Medical Society, Milwaukee, Oct. 6-8, 1915.

the canals. Herniae discovered at these sites were present before the strain, fall, or blow, potentially or small, or most often fully developed, but perhaps unnoticed, that is to say, the prolongation of peritoneum, and usually, if not always, some at least of the hernial contents were present, and the strain or injury, if it had anything whatever to do with the hernia, merely hastened the inevitable filling and stretching of the pre-existing sac.

Dr. Alexis V. Moscheowitz has an article in the Medical Record of April, 1915, on the relation of hernia to the workingmen's compensation law. He describes a hernia as a protrusion of an intraabdominal viscus into a pre-formed sac of peritoneum, and says: If this definition is correctly scrutinized, it will be found that the only essential part of a hernia is the sac. He illustrates his meaning by saying, an individual in the erect position has a hernia, which is composed of two parts, hernial sac plus hernial contents. He now lies down, and the contents are reduced. He, of course, still has his hernia, although there are no contents within the sac. Further, he states, that an open operation only can decide the question of the existence of a traumatic hernia.

In recent cases all evidences of a trauma, particularly that of a hematoma, or traces of unabsorbed blood, can readily be found. He divides herniae that occur suddenly into two classes, first, herniae caused by effort, and second, herniae caused by trauma. Hernia caused by effort always occur at certain definite locations, the hernial rings; hernia caused by trauma may occur in any part of the abdomen.

In the International Journal of Surgery for February, 1908, William B. Coley has an article on Industrial Accidents in relation to the development of hernia. This article is of unusual interest, and I quote freely from it. He analyzes 5,299 cases of hernia in adults, observed in the hospital for ruptured and crippled. Of this number, 1,015 attributed the hernia to lifting or carrying some heavy weight; 89 were attributed to a fall from a height, from a horse or from a bicycle; 40 to a blow on the groin or abdomen, and 8 to a kick. In other words, 70% appeared gradually, without any known or exciting cause, while 25% were believed to be due to lifting or carrying some heavy weight. Coley says that it is fair to assume that in the majority of those cases in which the hernia appeared directly after the unusual effort, there existed some relation of cause and effect; yet we

may here still assume the presence of a pre-formed sac, latent and empty up to the time of the unusual effort. He further says, that we must not forget that a sac which had been, up to the time of the accident, without contents, does not constitute a true hernia.

He reports a case of Dr. F. Tilden Brown, of New York. J. B., a male 18 years of age, groom, on April 9th, 1902, while riding, the horse reared and fell backward upon the patient. He immediately felt pain in the left groin, and could not stand upright. On feeling the painful part, he discovered a small lump. He was seen by Dr. Brown one half hour after the accident, and examination showed a tense, tender swelling, the size of a hickory nut, just below the external ring. Careful taxis for two or three minutes resulted in a sudden reduction of the tumor.

Paul Berger observed 4,621 cases of hernia at the Bureau Centrale, Paris. Of this number 1,427 attributed the rupture wholly or in part to a violent cause. In 52 of these cases the hernia was apparently due to external injury, several to the kick of a horse. In 58 additional cases, he says, it was impossible to separate the accident from the natural and normal effort associated with the work in which the individual was employed.

Berger says that a hernia cannot be forced by an accident through an opening in the abdominal wall, without the occurrence of very striking phenomena, such as acute pain, local tenderness, and hemorrhage into the tissues.

Daget says, that traumatic hernia is an accident of labor, and that a hernia of force is one which forms as the result of sudden severe effort of abnormal intensity. It is characterized by moderate size, sudden appearance, and is accompanied by severe pain. This is also an accident of labor.

Von Hassal and Walraven state, that there are, first herniae of weakness, which are the most frequent; second. herniae of effort, which arc of exceptional rarity; third, herniae of weakness, which, under the influence of effort, become herniae of effort. In the first class, the responsibility is none; in the second class, the responsibility is complete; in the third class, the measure of responsibility is established after the proportion due to predisposition has been established.

Kaufman, of Zurich, after a careful study of the subject in its medico-legal aspects, says, a hernia in order to be entitled to indemnity, must be of recent origin; it must appear suddenly; must be

accompanied by pain, and must immediately follow an accident. There must be proof that the hernia did not exist prior to the accident.

In Germany, a person with a traumatic hernia or accident hernia receives a rental during his disability. In Austria, a hernia is considered an accident, when due to a blow upon the abdomen, or when it results from a violent effort. In Switzerland, the indemnity for a hernia due to an accident is made proportionate to the predisposition. In France, the courts have held that a hernia is the result of force when relationship of cause to effect is proven between the accident and the hernia, first, by the nature of the effort, which must be sudden and violent, and second, by the severe pains which appear immediately after the accident and which necessitate the interruption from work.

Blaesius and Hamilton Russell believe that every inguinal hernia is pre-formed. Tillman says that the idea of sudden formation of a hernia is an illusion, while Kingdon holds that hernia is a disease and not an accident.

Graser, author of the chapter on Hernia in von Bergmann's System of Surgery, states that a hernia complete in all its parts can never occur at the moment of an accident, or by a single increase in the intra-abdominal tension, be it ever so great.

Coley, in conclusion, says, that the trend of surgical opinion is rapidly growing in the direction of considering practically all cases of hernia due to a pre-formed sac of congenital origin, which forms the great predisposing cause for hernia. This fact has already had marked influence upon many of the decisions in European courts, in cutting down gradually the indemnity in cases in which this predisposition was shown to exist. It will undoubtedly have a much greater influence in future decisions, although, I believe, he says, it safe to say that it will never be sufficient to remove all hernia from the category of accidents.

I am permitted to report the following case: On June 22nd, 1915, a young man, age 23, and living at Elkhorn, was riding a motorcycle at considerable speed around a turn, when suddenly the machine slid from under him and he was thrown violently against the handle of his cycle, which struck the left inguinal region. He suffered severe pain in the inguinal region, and when lifted to his feet, a protrusion as large as a goose egg appeared. The skin was apparently uninjured. He was brought to St. Joseph's hospital, and operated by Dr. Stratton. After the incision through the skin,

it was seen that the fibres of the external oblique were torn from the external ring outward to near the anterior superior spinous process of the ilium; the fibres of the internal oblique and transversalis were torn perpendicularly for about an inch or more, and through this gap the intact peritoneum was protruding. There was neither congenital or funicular process present.

In regard to the existence of or non-existence of traumatic hernia, surgeons seem to arrange themselves into three classes. In the first may be mentioned Blaesius, Hamilton Russell, Tillman, Kington, Graser and others. These men are of the opinion that never and under no conditions is a hernia due to a strain or traumatism. So far as I am aware, this is merely their opinion and belief, and that they have brought forward no proof in support of their contention, other than that in many cases operated a sac has been shown to exist.

The second class comprises surgeons who, while admitting the possibility of hernia from traumatism or ususual effort as an exciting cause, hold that in the hernial regions as a predisposing factor there always is a preformed sac.

In the third class are surgeons who hold that a hernia consists of a sac, sac contents and coverings, and believe that if an adult, who never has had a hernia, and as the result of unusual effort or traumatism a hernia suddenly appears, that this is a traumatic hernia, and an acident of labor in a medico-legal sense.

I think it most important in this connection to quote the experiments of doctors Nuzum and Pember in causing traumatic hernia in cats under anesthesia, by suddenly increasing the intra-abdominal pressure. In their experiments, herniae were readily produced in the inguinal region, and second, through the diaphragm.

My conclusions are as follows:

First, a hernia is a protrusion of a viscus from its natural cavity through an opening in the parietes, and that a hernia consists of three parts, sac, sac contents, and usually, sac coverings.

Second, that a protrusion never having occurred, the person has not a hernia, although he has inguinal and femoral rings, and may have a preformed sac.

Third, that a hernia, to be classed as one of effort or due to traumatism, must occur for the first time during unusual effort or traumatism;

that the hernia be small, tense, painful, and disabling—in other words, strangulated.

Fourth, that the patient be seen by a physician within a few hours, and that he testify to the above conditions.

Fifth, that the peritoneum is distensible, elastic, and in the hernial regions only loosely connected to the pelvie fascia, and that sudden, unexpected and great increase in the intra-abdominal pressure can tear the peritoneum about the internal ring or force a portion as a sac into a ring, producing a traumatic hernia.

#### ORCHITIS.

An inflammation may be defined as the response of living tissue to injury. The injury may be caused by chemicals, bacterial infection, excessive heat or cold, or traumatism.

Orchitis may be acute or chronic. The acute form may be due to traumatism, posterior urethritis, cystitis, urethral instrumentation, may be secondary to epididymitis, or follow the acute infectious diseases, especially mumps. The great majority of cases of so-called acute orchitis are really inflammations of the epididymis, and are due to gonorrheal infection.

No one could deny the fact, however, that orchitis may be traumatic in origin. The tissues of the testicle may respond to injury, the same as any other tissue, and probably due so more readily than most tissues, on account of their rich blood supply.

Guiteras divides contusions of the testicle into three degrees. In the first, there is an effusion of blood in the testicle, and even in the tunica vaginalis and cord. In the second, in addition to the effusion, there is laceration of the seminal tubules. In the third, in addition to the effusion and laceration, the tunica albuginea is torn.

In determining the causative factors of orchitis, one should be very clear in regard to the injury and the symptoms which follow, such as a severe sickening pain, great sensitiveness, early occurring swelling and ecchymosis; one should exclude an acute epididymitis, and examine the urine for threads and other evidence of posterior urethritis.

A young married man, age 32, recently came under my care, and gave the following history: Was boxing and wrestling with a friend in one of the gymnasiums of this city. Following the prac-

tice of many athletes, he had his testicles strapped up over the pubis by an elastic support. During a bout of boxing, he was struck a severe blow, which drove the left testicle against the pubis. He at once suffered intense pain and nausea, and had to be assisted to his home. The testicle became greatly swoolen, and was very tender. On the day following the injury marked ecchymosis appeared in the skin of the scrotum. The urine was clear, and the patient denied ever having had gonorrheal affection.

I believe no one will deny the occasional occurrence of traumatic orchitis. The principal requisite is to differentiate it from acute epididymitis, the result of posterior urethritis.

# BORDERLINE CASES UNDER THE WORK-MAN'S COMPENSATION ACT.\*

BY EDWARD QUICK, M. D.,

#### MILWAUKEE.

The title under which I make a few remarks implies at once a controversy. A borderline case is, of course, a case in which there is difficulty in deciding whether or not the case comes under the Workman's Compensation Act at all, or if it does come under the Act, to decide the amount of award to make.

In the Workman's Compensation Act we are at once confronted with certain technical terms which must be defined in order to administer the Act in accordance with the intent of the legislators who framed it. The Wisconsin Industrial Commission has defined the term "accidentally sustained" as used in Sec. 2394-3 in this way: "The term 'accident' is defined as 'an unforseen event occurring without the will and design of the person whose act causes it; an unexpected, unusual or undesigned occurrence'." In legal medicine an accident is defined "as an event occurring in an individual without his expectation and without the possibility of his preventing it at the moment of its occurrence."—Gould.

The Supreme Court in Pennsylvania has defined an accident "as an event that takes place without one's foresight or expectation; an event

<sup>\*</sup>Read in a Symposium on Accident Surgery and Workmen's Compensation at the 69th Meeting of the Wisconsin State Medical Society, Milwaukee, Oct. 6-8, 1915.

which proceeds from an unknown cause, or is an unusual effect of a known cause, and therefore not expected."—Peterson & Haines. The root meaning of the word, relates to the Latin "accedere" meaning "to occur".

It is easy to see that the law has given a very technical meaning to the term "accident". An accident in the legal sense does not mean always what is meant in Pathology or Surgery. In Pathology and Surgery, we are inclined to look upon the term "accident" to mean external violence, and as scientific men, we know perfectly well what external violence means. If a pathologist at the section table should announce to his students that the subject being sectional came to his death from external violence, the most immature and least well-informed student before him would have a perfectly clear idea as to the meaning of his statement. In fact if the pathologist should use "accident" without qualifying external violence he would be understood. Now, there is much difference of opinion in legal circles in regard to what constitutes "external" in the sense in which the word is used in an accident insurance policy, and with reference to Workmen's Compensation. In a case in which an accident policy provided compensation for "any injury caused by violent, accidental, external and visible means" and which contained a proviso that the insurance should not cover injury which arose from natural disease or weakness, the insured stooped to pick up a marble and in that act he dislocated a cartilage of the knee. Previously he had never had an injury to or weakness of the knee joint, and the court held that in the policy the word external was used in contradistinction to an internal cause such as disease, and that therefore the insured could recover indemnity from the company. This case is Horlyn vs. The Crown Accident Ins. Co., 1 Queen's Bench, 750.

It is seen readily therefore as a matter of law that our näive interpretations of the term external violence and accident are liable to a severe jolt when we got into the court room and attempt to advise the judge and jury on questions of personal injury.

An injury is defined as "any damage or harm to the body or any of its parts" and is derived from the Latin "in", not; "jus," right. Trauma is defined as a wound, but in the sense that we use it, it is practically synonymous with injury, and can mean any damage or harm to the body or its parts.

The framers of the Wisconsin Compensation Act

might have attempted to restrict the application of the law to those cases of injury caused by external violence in the strictly and purely scientific or medical sense; to those cases where the body sustains harm from coming in contact with something in the external world. The great majority of cases would have been covered by this and the feeling of people who had definite opinions in regard to the desirability of Workmen's Compensation would have been satisfied. But I doubt if it would have been possible for the legislators to have used the ordinary language of life and restricted the law to those cases. The language of an accident policy may be limited to any injury caused by violent, accidental, external and visible means, and yet the insured under such policy may be permitted by the courts to recover when he suffers dislocation of a cartilage of his knee in the act of stooping, an injury to the recti muscles or muscles of the back in lifting and many other things which at first blush do not seem bon fide accidents at all.

Case Reports. Bone and Joint Tuberculosis.

- 1. A young woman while leaving work, slipped and fell on the stairs. She immediately arose, walked home and returned to work the following day without experiencing any inconvenience, as a result of the fall. She remained at work daily for four months when she developed pain in the right hip and soon showed other signs of a tuberculous hip. Contention is made that the tuberculosis hip, developed as the result of the fall down the stairs. No hearing has as yet been held on this case.
- 2. A sixteen year old by working for a dairy company jumped from a delivery wagon and sustained an injury to the right ankle joint. This was in December, 1914. He stayed at home two days. He went back to work and remained two weeks. During these two weeks he was lame, and sufficiently so to attract the attention of the foreman of the dairy company. The foreman sent the boy to a physician. The boy is now an invalid presenting unmistakable evidence of tuberculosis of the right ankle joint. Is there sufficient causal relation between the slight injury last December and the destructive tuberculous lesion now present to warrant the Industrial Commission in finding for this employee?
- 3. A man forty-five years of age employed by a lumber company fell from a wagon May 19th,

1913. He had worked for this company many years and had never been sick. He fell on his hands and knees and to his knowledge did not hurt his back. He continued to work until June 4th having all the time severe pain in his back. In October, 1913, he was operated for appendicitis.

I examined this man May 18th, 1915. He had a rigid tender spine. Temperature was 99.5, pulse 90. X-ray examination showed a destructive lesion of the two lower dorsal and first upper lumbar vertebrae. The diagnosis of tuberculosis of the spine is doubtless correct. The commission entered an award in accordance with this diagnosis.

Is an injury ever the determining cause of a tuberculous lesion? We all know that tuberculosis may follow injury, but that one thing follows another is no proof the first is the cause of the second.

Until 1882 injury was looked upon as having an absolute causal relation to white swelling.

The relationship between injury and tuberculosis has been a subject of much controversy in Germany since the passage of the workmen's law in 1884.

There is in the literature much experimental evidence to show that micro-organisms introduced into the blood stream have a tendency to and frequently do localize and set up a destructive process in any traumatized part—bone, joint or soft part (Kocher, Nancredc, Chauveau). An injury tends strongly to localize bacteria. The bone is particularly predisposed by trauma.

"In a case of tuberculous arthritis if the reality of the accident is proved, if from the time of the accident there continued to be some pain and stiffness in the part and if symptoms suggestive of tuberculosis arise at a period not over three months from the accident, we are justified in regarding the trauma as causal" (Bosanquet).

## Cerebral Hemorrhage, Thrombosis, and Embolism.

4. A man was working on the second floor of a broom factory, manufacturing brooms. While at his machine he complained to some of his fellow workmen that he was getting a headache and felt dizzy and was going out to get a glass of water. On his way out he sat down in a chair for a few seconds and then got up and was attempting to descend a flight of steep stairs. He fell to the bottom of the stairs and was found in a dazed condition, could not speak distinctly nor walk with-

out assistance. It was soon noticed that a complete hemiplegia developed. At no time was the man unconscious nor were there any signs of a head injury. The patient has a marked arteriosclerosis with an Arcus Senilis but with a practically normal blood pressure and negative heart and kidney findings. Compensation has been claimed on the basis that the fall downstairs caused the apoplexy. The contention of the Liability Co. is that this man was developing this apoplexy while at work and fell down stairs as the result of the stroke. No reward has as yet been made.

5. An employee was lifting a basket of ashes on his shoulder when he suddenly became dizzy and noticed a loss of power in his left arm and had difficulty in walking. He developed a complete left sided paralysis. The patient is 62 years old with marked evidence of arterio-sclerosis and a blood pressure of 180. The claim was made before the Commission that the apoplexy was the result of lifting the basket of ashes. Contention of the city for whom this man was working, was that there was no history of an injury and that the apoplexy developed in the course of his normal employment while he was doing ordinary work to which he was accustomed and that it developed as a direct result of his arterio-sclerosis, independent of any strain. The Commission decided this case in favor of the City of Milwaukee.

Death of an insured will not be held accidental merely because it results from the rupture of an artery as he reaches to close a window. It is not appearing that anything was done or occurred which he has not foreseen and planned, except the rupture. . . . Feder vs. Iowa State Traveling Men's Assn., 78 N. W., 252 (Iowa, 1899).

6. A man forty-six years of age has been a carriage painter and apprentice since he was four-teen years of age. In March, 1915, he sustained an extensive third degree burn from gasoline flames involving the flexor surface of the left arm and forearm. He was placed in a hospital for treatment. The night of the fourth day, about 9 p. m., he was given a sleeping powder. He did not awaken for three days. He lay during these three days in profound coma.

When he regained consciousness he had a total aphasia and a right sided facial paresis. Function of the facial nerve was restored in about two

months. Motor aphasia and agraphia persist to the present, a matter of seven months. He has learned to say three or four words.

There is no history of syphilis. A Wassermann was made by Dr. Hopkinson and is negative. The blood smear does not show characteristic findings of chronic lead poisoning. Urine has sp. gr. 1020—no albumin and no casts. Blood pressure 120. There is a loud whirring systolic murmur.

We are dealing in this case with cerebral hemorrhage, thrombosis or embolism. If cerebral hemorrhage it is a pure coincident and has no relation to the third degree burn. And in which case the employee has no right to recover under the Workman's Compensation act.

Cerebral hemorrhage is most common between the age of forty and fifty. We have hardly any other theoretical grounds on which to postulate cerebral hemorrhage in this case.

Dr. Hopkinson did the serologic and blood work in this case and has engaged to discuss the relation between thrombosis and burns in general and particular.

Starr cites two cases of cerebral embolism, in his practice, following phlebitis of the saphenous vein. He believes secondary thrombi in the lungs were the probable cause.

We can easily believe that the third degree burn of the arm of the employee could cause thrombosis of local veins.

Under the caption "aberrant embolism" we note in the literature certain exceptions to the general rules concerning the sources and direction of emboli. Aberrant, atypical, paradoxical, or retrograde embolism is described—Zaun gave the name "paradoxical embolism". Rostan used the term "crossed embolism" or the transportation of emboli derived from the veins into the sytemic arteries without passing through the pulmonary circulation.

Cohnheim noted the passage of venous emboli through an open foramen ovale into the aortic system; and since then there have been enough observations of this so-called paradoxical embolism to prove that, although not frequent, it is really of practical importance. (Allbutt & Rolleston, Vol. 6.)

Zahn and Rostan found an open foramen ovale in 1-5 of their necropsies. They found three cases with emboli engaged in the opening. The same observation has been made by others. Perforation of Gastric Ulcer.

7. A boy of 15, while working at his usual employment was lifting a basket weighing about 30 lbs. At this time he noticed a sudden pain in his abdomen and he was forced to stop work and lie down. Previous to this time his health had been good with no similar attacks. The patient was seen six hours after the onset and presented a rigid, tender abdomen with signs of an acute perforation, either of an ulcer or an appendix. Operation revealed an acute perforation of the stomach with peritonitis. The question arose as to whether or not the lifting caused the perforation. The case never came before the Commission and no settlement was made.

Dr. Charles H. Lemon, Milwaukee: I did not know that I was to discuss this symposium at all until I came into the room and picked up the program, so that what I shall say will be more or less of an extemporary character.

The one question that the Compensation Commissions of this and other states seem to have settled for the doctors is, that there is no such thing as traumatic hernia, as we ordinarily understand that term. The difficulty in clearing up this subject has been that the medical man has confused in his mind hernias as we ordinarily find them in the inguinal region, with the question of hernias appearing after accidents, and has entirely forgotten the fact that a traumatic hernia may appear either in the inguinal region or in any other region, and most often it appears in some region other than the inguinal region.

Now, there have been many claims in Wisconsin and in other states, by men who have had hernias prior to their being employed in ordinary labor, and who possibly have not known of the existence of these hernias. These men have been subject to more or less strains from time to time, and have for the first time discovered a protrusion, and have honestly believed, in the vast majority of cases, that the effort they made on that particular day and at that particular time was the cause of the hernia. But the experience that the Industrial Commission has gained has been to the contrary, and it is the experience of men who have done a large amount of life insurance work, that many men have been apprised of the fact for the first time that they were suffering from a hernia, who never before that time had the slightest idea that such a condition existed.

If you accept as a definition of hernia, a protrusion of a viscus, you are going to be led astray. I have in mind a case of a lineman who fell 45 feet from the top of a pole, where he received an electric shock, landing on an ax handle and fence post, and receiving an enormous wound of the abdomen, with a fracture of the liver. Now, this man certainly had a hernia. I could

stick my fist right into his peritoneal cavity, pushing the skin in front of it. The only substance that was in that protrusion, as the man lay on the bed, was an enormous amount of blood. Yet, when I operated on him and released this blood, I found that not only the muscles of the abdomen has been torn through, but I found that the peritoneum had been lacerated. Now, I think if we will keep in mind the fact that in traumatic hernias we must look for a laceration of the peritoneum rather than for a sac of any kind, we will be less apt to be led astray.

The case reported by Dr. Levings, to my mind is a very significant one, because we know that the peritoneum is loosely attached to the inguinal region. It is possible that in operating as the surgeon operated in that case, that a protrusion of the peritoneum may be found, due to the looseness of it; but that is an entirely different proposition from expecting to find a well-defined sac in the inguinal region, many times extending down into the scrotum. But in these traumatic hernias I have seen, I have invariably found a laceration of the peritoneum.

Another case which comes to my mind, is that of a man who was holding one end of a heavy board on which concrete had been mixed. Another man on the opposite end let go of the board, and a sharp corner ripped this man's abdomen open subcutaneously; he had a rupture just above the umbilicus, and he had another one just below the umbilicus, and in both cases there was a laceration of the peritoneum.

The difficulty in trying to solve this question is that the cases do not come to operation earlier. If they came to operation early, we would have had this clinical experience long ago, and should not have been subjected to this, as I think, almost ignominious position of being found by industrial commissions throughout the United States, not only the state of Wisconsin, to be mistaken in the large majority of the cases, as to the facts we found upon examination, that many men who had the hernias prior to the accident received the hernia at the time of the accident.

Dr. W. F. ZIERATH, Sheboygan: It is getting late, and in fairness to Dr. Connell, I am not going to say very much about the last two papers.

The first two papers, those of Mr. Crownhart and Dr. Rosenberry, were very interesting to me. I shot my bolt in the last May issue of the Wisconsin Medical Journal, and the thing that very much interested me was what the gentlemen would have to say about the 90-day clause in the Workmen's Compensation Act; they said nothing. That is a thing that is very vital to the medical profession, inasmuch as we are compelled to assume a burden that the employer ought to bear, in taking care of a patient after the 90-day period. I hope others will carry on the discussion where I leave off.

I am just going to leave a few thoughts with you, as brought up in the papers.

Dr. Rosenberry has said that the commission has been given power to establish fees. It is very important to the State Medical Society to determine what those fees shall be. It ought not to be left to the Commission. unaided. Just recently I had a case before the Commission in which I charged the usual fee prevailing in Sheboygan for an operation for hernia, a hundred dollars for the operation and ten dollars for the assistant and ten dollars for the anesthetist, \$120 in all. The case was contested by the insurance company and they said that if the case proved to be a compensation case, that they were willing to pay not more than \$75 for the operation and the assistants, because they could get all the operations they wanted done in Milwaukee for \$50 apiece. So, if you are going to have such a variation in fees, it is very important that a fee schedule be established, with the aid and in consultation with the State Medical Society. I think that we would be able to give them better information concerning our fees than they can get from the attorneys of the insurance companies.

Mr. Crownhart has also suggested that the doctors accept the provisions of the Compensation Act. True, undoubtedly. But when you have a patient that has had a bad injury, and the insurance company and the employer refuse to take care of him after 90 days, and you feel that you are compelled to do so, because if you do not he will get a lawyer and sue you for malpractice, you feel that something is wrong. And there are just three things wrong with the compensation act. The admission made by Mr. Crownhart that of the approximately two million dollars paid by the Commission, the doctors get \$400,000, and the patient \$800,000, and the insurance companies a million dollars, leads me to feel that the Compensation Act would be very materially strengthened by doing three things, eliminating the 90day clause, establishing a fee bill, and having the state take over the insurance feature and eliminate the insurance companies. It would be very satisfactory to the physicians, I am quite sure.

PRESIDENT: That is coming, doctor.

Dr. Zierath: I hope so. I believe in the socialization of medicine, and I preached that last year. The compensation laws are just an opening wedge. You said in your address, Mr. President, that it was the dawn of a new social system which is beginning to glimmer. It is coming with a rush, but the doctors are getting the wrong end of it. I think this phase of the insurance in the Compensation Act ought to be discussed very freely by the physicians present, if the time permits, and possibly we can postpone the other paper until later.

Dr. V. A. Mason, Marshfield: We are very fortunate to have this subject brought before us for discussion, as it is of the greatest importance to us all. We are very much interested in hearing the views presented by the Doctor representing the Insurance Company and the broader side presented by Mr. Crownhart of the Industrial Commission. Mr. Crownhart admitted that the fees the physicians should receive should be the fee the average patient would pay. Now, gentlemen, it is a deplorable fact, that some of our insurance companies

do not look at it in this light, would have us work for almost nothing, try to tell us how to treat our patients and even insinuate that we make too many calls.

We are aware that the Industrial Commission of Wisconsin has sent for fee schedules from each County Society and is now ready to give us relief when some of our bills are turned down by the Insurance Companies for being excessive, when in reality they are no higher than we would expect from an ordinary patient. There is not a surgeon in the house that will not agree with me that it is ridiculous to expect a man to trephine the skull for fracture, for the sum of \$25.00, or to amputate at the hip for \$50.00, yet, gentlemen, this is the fee allowed by one of our mutual insurance companies, and bear in mind this includes the fee for your assistant and also the anesthetist.

Now, gentlemen, in conclusion, it behooves each one of us to refuse to give our services for a pittance to add to the profits of any insurance company, and if our fees are to be set—to see that they are set by the Industrial Commission after conferences with our various State Societies, because it is only in this way that we may receive a just reward for our work.

DR. M. D. BIRD, Marinette: Mr. Crownhart made the statement that the doctor had the advantage with the compensation act. It is eminently fitting that the doctors should have had an advantage, but they have also had a disadvantage. A state agent of one of the liability insurance companies of the state made the statement within a month that it cost his company \$300 for every doctor that they had carried a liability policy on in the state of Wisconsin in the past year. Well, if a doctor is going to invite malpractice suits in taking these accident cases away from the liability end of the employer, he certainly is not getting the long end of it. It has occurred to some of us men, that it might be a good plan to have the Industrial Commission enlarged or granted new powers to settle the differences between patient and doctor in regard to eliminating the civil courts. If one goes into a circuit court to try a case against a doctor, you stand convicted before you start, and must prove your innocence, rather than have the plaintiff prove your gilt. Put a poor boy up on the front seat, with a leg off, before the jury, and you can put all the witnesses you want to on the stand, and you are beaten, because the average jury is made up of laymen whose sympathies are with the patient. And inasmuch as the Commission has the power to settle disputes between hospitals, and the insurance companies' doctors, I say, why not enlarge those powers, and have the doctors represented on the Commission in a proper way, and adjust the differences between the doctors and the patients.

Also, in regard to the 90-day clause, it has occurred to me that it might be a good plan, that when the liability company ceases responsibility at the end of 90 days, that the doctor be automatically discharged. Take, for instance, a case of pyemia, or low grade sepsis, which will run a long time, and 90 days is just a start for that case, and you are into it, and at the end of 90 days where

are you going to get off? You have a charity case, if you are honest with yourself. I will guarantee that nine men out of ten have taken care of that case gratuitously. That is not fair. So I think that a Compensation Act is good, but it needs amending. I think I see the handwriting on the wall that the time is not far distant, when the state will take over many features that the insurance companies are now carrying, and I think that even the practice of medicine will be taken over by the state the same as has been done in England.

We also need legislation establishing the two year limit of the malpractice act; not permitting six years to hold in which the patient may bring his action, as some cases are being tried at the present time in this state, under the statute of "breach of contract" which permits that limitation.

Dr. J. P. Connell, Fond du Lac: There is one thing that I should like to bring up, and that is that the Commission, particularly where I live, constitutes the judge, jury and everything else. The physician has very, very little to say. Take a fractured leg, and it may be in comparatively good shape, but the Commission gets an X-ray of it, and in their opinion it does not look good, and, as Mr. Crownhart said, that is referred to some one else, whether it is pets or who else, I do not know, and they depend on the judgment of that man that they send the patient to.

I had the pleasure of seeing a fracture which was right straight across the tibia. I took X-ray plates of that for one year after the man was walking on it, and the osteoblasts were still not in sufficient number but what you could readily see there was a fracture there; to the ordinary layman, it would seem as though there was not union, but there was union. For a year the fracture was visible with the X-ray. That case was put up to the commission, and if it was not in good alignment, it would be turned down as a bad job. I do not think the Commission has any business to pass on that kind of a job at all. I think they are going outside of their field, and they should have some one or two competent physicians either to consult with or as members of that commission, to get a good opinion.

Dr. J. R. Currens, Two Rivers: Mr. President and Gentlemen: In regard to this 90-day clause, I have suffered from it on a couple of occasions, but I have had to do what my friends here have been calling charity work and it seemed pretty hard. After I had a few cases that came into my hands from a Michigan doctor, I found out they only gave him three weeks up there, so felt satisfied that I got paid for 90 days. Wisconsin, you see, is not the worst state, after all, in this matter of paying.

In regard to fees, I do not think this Commission should go ahead and make a fee-bill from minimum rates sent in from some old fee-bill that is superannuated. I think the physicians should get together and each county society appoint a committee to form a reasonable fee-bill and send it in to the Commission.

I consider the class of men that insure insurance com-

panies by taking a low percentage on pay-roll basis, the most dangerous and unethical that we have to contend with. Nearly all insurnace companies try to make a percentage agreement in these cases. I have in mind one case in which a large concern employing seven or eight hundred men, with a pay-roll of between three and four hundred thousand dollars per annum, transferred their insurance to a firm of insurance brokers, outside the state, who made an offer of one-eighth of one per cent. of the pay-roll, to the physicians of the city. There were about 400 accidents, large and small, the previous year, amounting to about \$1,500.00, which, under this percentage, would amount to about \$400.00. I am pleased, however, to say that none of the local physicians would take it at that figure, or, in fact, for anything less than fee-bill rates.

There are, however, I am sorry to say, men in our profession who have worn themselves out in their present locality, who are ready to accept such offers, hoping thereby to establish a new and better practice.

Dr. A. J. CAFFREY, Milwaukee: I have a schedule here of a fee bill that was sent to the members of the Milwaukee County Medical Society two or three years ago, and the committee claimed, I think, at that time, that it had met with the Commission to decide the bill. The committee is made up of Dr. Lemon, Dr. Sayle and Dr. Louis F. Jermain.

The gentleman from the north, Dr. Zierath, says that they send them in here, and operations are done for \$50, when they want \$100 up there, or \$50 for the amputation of a thigh, when they want \$100 in Sheboygan. This fee bill gives trephining \$100, and amputation of the thigh \$100, as the minimum fee.

But the point I want to make is with reference to minor surgery. The minimum fee for attending injuries of all kinds, such as dressings and bruises and tears, burns and cuts and scalp wounds, sprains, strains, contusions, arresting hemorrhages, stitching wounds, etc., is \$5 for an ordinary case, and \$25 for an extraordinary case. You will find if you send such a bill for first aid in to the insurance company, which usually has the employer insured, that they will object to the bill, and yet that is given as the minimum fee and not the maximum.

I was glad that Mr. Crownhart brought out one point, which touches me in a way, if it does not touch any one else. You are attending in a family say, for 15 years, and an accident occurs, and you are called to see the injured party, whoever it may be, and you will give first aid, and give him the best you can. Then you will go home, and within the next day a fellow will come along with a paper, and say that he is the "city doctor," or the "doctor for the factory" where the man was injured, and will say that he was sent to the case by the city or the factory, or whatever it might be, and that if the family lets this particular physician attend the case, he will get free treatment, where if he continues with the family physician he would have to pay the physician himself. According to the ruling of the Commission and the recent law that has been passed, the Insurance Company has the right to employ its own

doctor. However, that may be all right, but then the parent will telephone the family doctor that the "city doctor" is attending, or the "factory doctor" is attending the case, and the family physician is discharged. Now, that condition of affairs might be all right providing the doctor who worms himself in on the case would call up the physician who was attending the case first. Such things make quarrels and bickerings in the medical profession, and turns brother physician against brother physician, and all kinds of disturbances are brought about just by those conditions where the doctor goes in and tells that he is sent by the factory, or the city. The remedy for such things, I believe, would be, just as has been stated, the State to take charge of the insurance feature of it, and at least that the physician call up his brother physician when he is going to steal his case.

# AN UNUSUAL CASE OF LATERAL SINUS THROMBOSIS.\*

BY GEO. F. ZAUN, M. D.,

MILWAUKEE.

On January 16th, this year, I was called to see J. K., a Greek, aged 25, on account of an obscure headache which had increased in severity from day to day for a week with more or less well marked rigors and chills until this day, when the headache was excruciating and causing much mental and physical prostration. The patient had always been in good health until eight months before the present attack when he had been treated for suppurative otitis media of the right side which, after discharging for a short time, quited down and was apparently healed. Three weeks before the present attack the ear had begun to discharge again but caused serious symptoms only the last week. His general condition appeared to be bad and his chills now lasted twenty minutes; there was a temperature of 105, followed by profuse sweating and a fall of 97. The pulse rate varied between 100 and 130. Examination showed a slight discharge of pus from the ear and palpation over the mastoid and region of the emissary vein elicited tenderness extending backward into the posterior triangle of the neck, but with no marked oedema. appeared to be tenderness also along the course of the internal jugular vein of that side. The headache did not seem to be localized to the side of

<sup>\*</sup>Read at the Second Annual Meeting of the Wisconsin Eye. Ear, Nose and Throat Specialists, Milwaukee, Oct. 8-9, 1915.

the affected ear. Examination of the fundus of the eye showed the optic disc choked and raised to about 4 dioptres and this with the semi-comatose condition of the patient showed undoubtedly brain pressure, making an immediate operation seem imperative. In consultation held at this time, my diagnosis of lateral sinus involvement with brain pressure from some cause or other, was concurred in and the patient was operated upon two days after I first saw him. The regular mastoid operation was first done. The mastoid process consisted of cancellous bone with few pneumatic cells. Some ill smelling pus was encountered. After the antrum was thoroughly opened and explored, the operation was extended backward. As soon as the compact bony covering of the lateral sinus was opened a large amount of gas made its escape with an explosive hissing sound resembling the report heard from a punctured auto tire under 20 or more pounds of atmospheric pressure. Following this there appeared an abundance of foul smelling pus which issued from the peri-sinus spaces and from the extradural area contiguous with this region. From the amount of gas and pus present it was thought that the dura had been separated from the bony skull for a considerable extent thus placing the brain under the immense pressure referred to and which probably was the chief factor in producing the choked disc. After opening the bony sinus over a larger area the membranous sinus walls were found completely collapsed and apparently agglutinated and instead of the usual pearly, bluish-gray of the normal convex sinus there was a longitudinal groove from the knee up high into the dura where it was perfectly closed by an organized plastic exudate. The exposed wall of the membranous sinus was opened into and what little lumen was left contained what appeared to be a viscid sero-purulent material. The exposed lumen was gently but thoroughly curetted down to the knee when moderate hemorrhage presented. Likewise in the direction of the torcula. A small iodoform gauze drain was inserted into the lumen of the exposed portion, the entire wound lightly packed with gauze and a large moist dressing applied over all. The patient's general condition improved immediately after the operation, the choked disc disappearing in a few days and he made a practically uneventful recovery with no untoward effects since. Unfortunately, I am unable to give a report of a pathological finding in the case, as, in the hurry of caring for the patient, the

examination of the pus from the abscess cavity was neglected. Neither was there a blood culture made in the disease in order to determine the probable existence of bacteriemia for the purpose of a diagnosis which is so highly recommended by Seymour Oppenheimer. The case had gone beyond the stage where no characteristic symptoms are present, and the septico-pyaemic temperature curve from thrombotic disintegration and general systemic absorption plus the other symptoms present seemed to leave no question as to the diagnosis, and rapid action was essential to the patient's recovery. Apparently the portion of the sinus involved in the diseased process which furnishes the material causing the profound symptoms was the sole source of the infection, because the moment the tension was relieved and drainage established, recovery was initiated. The absorption was probably more from the infectious material under pressure than from a virulently infected thrombus and a patholigically injured intima which harbored an infected clot. It would have been interesting to know the pathogenic cause of the development of the large amount of gas present which apparently was retained without leakage and was able to cause an intracranial tension capable of showing a 4 diopter raise of the optic disc, and peripapillary oedema. I could find no similar case in the literature in which the presence of gas was mentioned as the cause of papillary oedema, although Jansen mentions the fact that there is some retinal oedema in half of the cases of lateral sinus involvement. Tenzer, in Passow's clinic, found oedema of the optic papilla only twice in twelve cases. They do not speak of gas as the cause but rather lead one to infer that it is due to stasis consequent upon thrombosis of collateral sinuses, blocking the ophthalmic vein, as is the case where the region of the mastoid emissary vein causes much oedema to be present. The jugular tenderness present before the operation quickly subsided with the improvement of conditions in general. The bacillus aerogenes capsulatus of Welch is mentioned by bacteriologists as having been found in disease of the meninges and may have been the causative agent in the development of this peculiar condition. However, since it is an obligatory anaerobe it would be difficult to know by what atrium it could enter and find favorable developmental conditions and then produce such a state as was found here.

Lannois reported a case of lateral sinus disease in which he found the bacillus coli communis in pure culture. No other pathogenic micro-organisms seemed to me to be capable of causing conditions as found here on such a large scale. Koerner in speaking of prognosis says that in streptococcus and anaerobic infections, the prognosis is bad. However, the virulence varies and if drainage is good recovery should be the rule even in a case well advanced.

# JUVENILE HYPERTHYROIDISM.\*

BY A. L. KASTNER, M. D.,

MILWAUKEE,

The term "juvcnile," as used by W. H. Lewis,¹ will serve to indicate that the present consideration of hyperthyroidism is limited to the occurrence of this condition in children under ten years of age.

Judging from the scant mention it receives in pediatric text books, most authors seem to agree with Sieger<sup>2</sup> who, because he finds about 25 cases in the German literature and as many more in general literature, concludes that "Basedow's disease has only a limited pediatric interest." In the Mayo Clinic series of 1,512 cases, operated on for exophthalmic goiter, only five were under ten years of age. There are records of cases in children as young as  $2\frac{1}{2}$  years.

I do not intend to enter into a lengthy discussion of the etiology of hyperthyroidism for that, as Mr. Kipling would say "is another story." In ehildren as well as in adults the functions of the thyroid gland are complex and hyperthyroidism in them may, I believe, be called into being by factors as various and numerous as the functions of the gland. Even though the ehild under ten is not open to the disturbanees occasioned by the sexual glands which, according to some, play such a role in hyperthyroidism in adults, still his is a period of growth and development which makes demands on, and makes liable an overthrow of, the balance of the organs of internal secretions and the nervous system.

Disregarding then all other possible etiological factors, I will briefly mention the role that focal infections seem to play in this condition, for that, I believe, may have some bearing on the case I

report. It has long been recognized that tonsilitis, acute infectious diseases, so-called "rheumatism" and even carious teeth, in fact, any condition eapable of producing systemic poisoning, were associated or in some way intimately connected with hyperthyroidism in its various forms.<sup>3</sup> <sup>4</sup> S. P. Beebe has little doubt of the causal relationship of pathological conditions in the nose and throat and the origin of hyperthyroidism and comments on the prompt relief of symptoms of the latter which follows the elimination of infection in the sinuses, nasopharynx or tonsils. So also do Frank Billings and his co-workers, in the light of Rosenow's newer methods of bacterial culture give remarkable evidence that there is a possibility of an infectious type of hyperthyroidism that is due to focal infection. To allude to Rosenow's work again, he isolated an anaerobie Gram-positive, diplo-bacillus-like organism from human thyroids, removed by operation in cases of exophthalmie goiter, and twice isolated the same germ from the blood in a severe case of the same nature. The same result was obtained in some goiter-bearing dogs. Conversely,9 that the inoculation of certain micro-organisms and the induction of toxemias produce a chronic hyperplasia with colloid or a complete acute hyperplasia of the thyroid in animals has been reported by Tarrant.7

The symptoms occurring in the five cases of juvenile hyperthyroidism in the Mayo Clinie series, cited before, were, in their order of frequency exophthalmos and tachycardia, mental irritability, tremor and vasomotor disturbances of the skin. In children the enlargement of the thyroids is said to be frequently most marked on the right side. The tachycardia is pronounced. Frank exophthalmos, as exhibited in adults, is more rare in ehildren, the eye symptoms being mostly confined to a staring, unwinking look, and the loss of the normal agreement between the motions of the lids and excursions of the pupil in looking upward and downward. (Stellwag's and Graefe's signs.) The rapidly heaving, pounding heart action becomes a striking symptom as seen and felt through the thin-walled chest of the child. The heart may be dilated and a soft blowing murmur heard over the precordium and the great vessels. The tremor is remarkable inasmuch as it often is eoarse, partaking more of the nature of choreie motion than of the fine tremor of small amplitude commonly seen in adults. Sometimes the two tremors are com-

<sup>\*</sup>Read before the Milwaukee Medical Society.

bined. Trembling may at times affect the whole body. Vomiting and diarrhoea are not common symptoms. Slight rises in temperature have been noted. Mental irritability and nervousness, though present in almost every case, are not so marked in severity as in adults. Very rarely will mental depression be shown. There may be excessive perspiration. In long continued cases, the skin may be disturbed by vitiligo, purpura, edema, and pigmentations. In such, slow but progressive emaciation also occurs. A lymphocytosis is frequently found.

The course of this disease in children offers some departures from what we are accustomed to see in adults. The passing of a few days or weeks may witness the high point in the development of the condition and a few weeks more the disappearance of all symptoms. (Demme and Mueller.<sup>2</sup>) A few cases have gone over to myxoedema. Some children with marked exophthalmos and tachycardia, such as would be attended by great disability in their elders, continue their customary strenuous activities. On the other hand, long continued illness, incomplete recoveries, and a tendency to relapse have been observed.

Mary A. Age 7 years. Jewish. Entered North Side Dispensary December 12, 1913.

Family History: Negative, excepting that an older sister has simple goiter and chlorosis.

Previous Medical History: Measles about five months ago, slight attacks of bronchitis and rhinitis. No history of tonsilitis.

Present Complaint: For last two weeks complains of headache, disturbed sleep, pain in ankles and wrists, excessive sweating, and feeling "nervous." Has lost some in weight. Irritability and nervousness so marked while in school that she was brought to the attention of the school physician, by whom she was advised to seek medical aid.

Examination: Temp. 99.4. Pulse 120, irregular. Resp. 18. Poorly nourished. Throat negative. Deciduous teeth carious and parts of gums inflamed. Thyroid enlarged, especially middle lobe. Systolic murmur over right lobe. Circumference of neck 10½ inches. Erythema marmorosum over chest and forearms. No exophthalmos or any other eye symptoms. Chest is small and scapulae "winged." Forcible, pounding, irregular heart action noted by inspection. Cardiac dull-

ness increased. Apex beat a trifle to left of nipple line. No murmur noted. Very fine tremor in extended fingers, also a course choreic twitching can be seen. No choreic twitching when hands are held.

Blood Examination: Haemoglobin 80%. Red count 5,500,000. Polymorphonuclear neutrophiles 64%. Eosmophides 1.3%. Lymphocytes, large 9.5, small 24.3. Ehrlich's Transitionals 0.9. Roentgenograms made recently by Dr. Eisen show alveolar infection.

Course of Disease: In seven days after the first visit improvement had taken place. The fine tremor was not noticeable, though it appeared again later, and the heart action was not so tumultous. Excessive sweating left her soon after. Sleeplessness was troublesome for a month or longer. Though the heart action remained rapid and irregular, varying from 100 to 120 beats per minute, it had entirely lost its pounding character in a month's time.

The patient was well able to resume her school work in 10 months from the beginning of the illness. Painful joints, sometimes accompanied by slight swelling appeared and disappeared up to a few months ago. The circumference of the neck, though always taken with the same steel tape and under the same spring tension, varied irregularly from 93/4 to 101/4 inches. The peculiar net-like mottling of the erythema marmorosum, though it disappeared from the chest, was persistent on the arms and was noticed on the warmest summer days. It is there even now. Though frequently taken, usually at 2 P. M., at no time was a temperature recorded higher than a degree above normal. The last blood examination made about one year ago, showed a lymphocytosis. Gain in weight and strength was steady but very slow.

At the present time the thyroid shows a slight enlargement, there is a barely noticeable choreic motion in the outstretched hand, the pulse is 78 and regular, and the patient goes to school and plays like other children of her age.

Treatment: For the first weeks this consisted of rest in bed and small doses of Quinine Hydrobromide, grains 2 t. i. d. Later on Fowler's Solution, Ergotine, Salicylates, Antithyroidin and Thymus Extract were given at various times. Of the value of rest there was little doubt. Of the drugs, the Quinine Hydrobromide and the Salicylates

actually seemed to influence the condition for the

Extraction of the few deciduous teeth that lodged in infected areas was suggested but refused. A kind nature has removed some of them now and the mouth condition at present is fairly good.

#### CONCLUSION.

The case reported gives clinical evidence of a polyarthritis or "rheumatism," as you wish, hyperthyroidism and alveolar infection. Even though in the present instance I can not give proof positive by Rosenow's methods, that the polyarthritis and hyperthroidism took their origin from the focus in the mouth, the association of these conditions, when taken into account with the many other cases of like association is, to say the least, suggestive.

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# WHAT EVERYONE SHOULD KNOW ABOUT CANCER.

[Summary of Paper by Dr. Joseph C. Bloodgood, Baltimore.]

In the year 1912, in the registration area of the United States, the deaths from cancer among persons aged 45 or over numbered 39.210, and from tuberculosis only 20,882. The registration area embraces about three-fifths of the population of the country. Thus it appears that about 65,000 Americans of middle age die of cancer each year.

But we can safely say that if the public is educated in regard to the facts about cancer its annual mortality will be reduced at least one-half perhaps two-thirds. We should educate ourselves to fear the beginning of cancer rather than wait for its late stages. In all forms of cancer fear of the disease comes too late. But fear at the first appearance of any suspicious sign will be of great value. This fear will induce patients to seek advice and treatment in that early stage in which the chances of a cure are best, even up to 100 per cent.

In cancer of the skin, lip and tongue, and in the regions beneath the skin, such as in the breast, thyroid gland and muscles, pain usually comes late, so if one waits for pain one often waits too long. This is an unfortunate state of affairs, for in the beginning there is no difference between the warnings of cancer and those of other diseases that are not cancer. We know to a certainty, however, what warnings may suggest the beginning. This is the opportune time for the examination which will lead to diagnosis. This is the time for treatment which will promise the best results with the least danger.

Cancer never begins in a healthy spot. In external cancer the warning is always something that may be seen with the eye or felt with the finger. These first signs are warts, moles, little areas covered with a scab or unhealed wounds or sores, or there may be a little lump or nodule beneath the skin or deeper. Pain is rarely present.

Unfortunately, many people have frequently observed all of these things and they have either disappeared or remained unchanged for years. They remember these eases, but do not realize the great number of unfortunates in whom cancer has developed from such apparently innocent defects. It is not for the patient but for the physician to decide whether these visible and palpable abnormalities are to be left alone or removed. In this stage the removal of the defect always accomplishes a cure and sometimes it can be healed without removal.

There is every reason to believe that cancer of the uterus should be placed among preventable diseases. There is always a discharge of a different character, at a different time and for a longer period than normal. Every woman should be educated never to conceal such symptoms, but immediately to seek the physician's advice.

In a woman over 25 the finding of a lump in the breast should be considered a definite warning. If this lump is subjected to treatment at once, the chances are 50 per cent, that it is not cancer. In such a fortunate event it is only necessary to remove the lump. When the surgeon at his operation finds that the lump is eaneer, the chances are still one out of four that it is the least malignant form of cancer, in which the probabilities of a cure are 100 per cent. If the lump proves to be of a more malignant form of eaneer, the probabilities of a cure, at the worst are still 85 per cent.

But when the woman delays, the chances of the lump becoming fatally malignant increase with each week's delay. The same operation for cancer in the late stages reduces the probability of a cure in the least malignant form of cancer from 100 to 64 per cent, and in the more malignant types from 85 to 33 per cent.

Unfortunately, women remember those lumps which have been present a long time and in which cancer has not developed. They also may know of lumps which have disappeared. What they should know and remember is that delay in seeking advice and treatment is gambling with death.

In cancer of the lip and tongue every man is similarly warned in time; there is always first to be seen and felt some abnormal defect. This defect is often a burn from smoking or an irritation from ragged teeth. When men heed this warning and receive treatment within a few weeks, the probabilities of a cure are 100 per cent. But any irritation of the little skin defect, or injury to the nodule beneath the skin, increases the probability of the development of cancer, or if cancer is always present, of its more rapid and fatal growth.

In cancer of the bones the early warnings are usually obscure, but if anyone receives an injury to a bone and the swelling and discomfort do not disappear in a few weeks the physician's advice should be sought and an X-ray examination made. The experience of pain or discomfort in the region of any bone should be looked upon as a warning.

The problem of early recognition of internal cancer is a very difficult one, because there are few very definite signs. One, however, is always warned by a feeling of discomfort and some sensation never before experienced, and this is usually associated with what is called "indigestion." But such symptoms are so frequent in many individuals in whom no serious disease develops that the majority do not know that they may be the first warnings of internal cancer. The finding of blood in the secretions should be looked upon as a definite warning.

The recognition in their earliest stage of conditions that may lead to cancer, or of cancer itself, indicates a treatment which in the majority of cases accomplishes a permanent cure. In cancer of the skin, lip and tongue, for example, the operation in this earliest stage should accomplish a cure in 100 per cent. of cases. The operation is a simple one; it can usually be performed under local anæsthesia; there is no danger; there will be no mutilation.

The operation for cancer of the breast is neither serious nor dangerous, nor is the operation for cancer of the uterus. Few realize that operations for cancer of the stomach, colon and the kidney are also by no means dangerous. The failure to cure is due to delay, not to surgery. People, however, cannot be treated unless they seek advice, and as a rule they do not seek advice in this earliest stage.

When you consult a physician insist upon thorough examination first, and not on treatment. There is no doubt that until recently the majority of persons, when ill, wished immediate relief and strenuously objected to

any unusual preliminary examination. The briefer the examination, the better the impression the physician made. But if you wish protection from cancer or from any serious disease you must submit to a thorough examination before treatment.

The "snap" diagnosis, or a diagnosis made on a superficial examination, even if correct, simply means that the disease from which you suffer is in such a late and hopeless stage that its nature is written in capital letters on the surface of the body. It is in the beginning of most diseases that the diagnosis is more difficult and can be made only after a most painstaking examination, often only with the help of instruments of precision and laboratory investigations.

Remember that medicine which relieves pain does not, as a rule, have any effect upon the disease itself; it simply produces a period of freedom from discomfort and by so much delays the best time for treatment. This is the secret of most quack medicines. This is also the secret of most drugs you get from a physician when you demand treatment without a thorough examination.

You will always be warned in time. Seek from those who know what these warnings are. The warnings of cancer do not differ from the warnings of diseases that are not cancer. These warnings must excite fear of the beginnings of cancer, so that you will seek immediate advice. The physician must do the rest.

Cancer is not an infectious disease. Again, it is not hereditary. And do not take "blood medicines" to protect you from it, for it is not a blood disease.

Cancer always begins in a single spot, and in that spot there is always first something that is not cancer. There is always an interval between the first warning and the development of cancer. There is always an interval between the development of cancer and its spread from that spot. In a few instances the interval may be only a few weeks; in others, months; in many, years. No one can tell this interval. Delay, therefore, is gambling with death.

The cure of cancer at the present time is not to be found in a drug, nor in a serum, nor in a ray, nor in a miracle, but simply in the education of the people as to the signs of its beginning in purely local lesions and the importance of an immediate examination, which will lead to recognition and treatment in the most favorable stage for a cure.

Investigation in the surgical-pathological laboratory of the Johns Hopkins Hospital and University has demonstrated that the local propaganda of education has already had tremendous influence for good. The cases of early lesions of the skin, lip and tongue, in which the probability of a cure is 100 per cent., have increased in the last five years from 8 to 30, or more, per cent. The results in the operative treatment of fully developed cancer in these areas have also been tremendously improved. In cancer of the tongue—the most dangerous form of external cancer—the percentage of permanent cures has increased from 21 to 50 per cent.; in cancer of the breast, from 35 to 42 per cent. This improvement is due to earlier operations and not to better surgery.

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## **EDITORIALS**

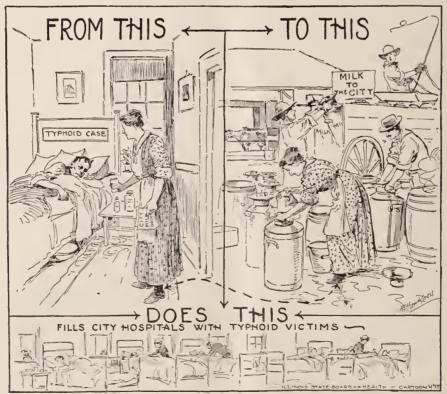
# THE TYPHOID PROBLEM.

# Most cities now-a-days have been successful in

obtaining a water supply free from pollution. The consequence is a marked reduction in the morbidity and mortality of typhoid fever. The noticeable decrease in Milwaukee may be seen in the follow-

Year	Morbidity	Mortality	100,000
1912	593	99	26
1913	155	45	11
1914	123	33	8
1915	*76	14	4-9 Est.

\*To date Oct. 1st, 1915.



-Courtesy of Illinois Health News.

ing figures, kindly furnished by Dr. G. C. Ruhland, Health Commissioner.

The milk supply is still a source of danger, for it comes from the country districts where the laws

of hygiene and sanitation are not observed by the people. The majority of the typhoid fever cases in the cities have developed in small towns or villages. It thus becomes the duty of every doctor to act as sanitary inspector and hygiene educator among his patients.

# NATIONAL CONFERENCE OF CHARITIES AND CORRECTION.

Announcement has been made of business and local committees of the forty-third National Conference of Charities and Correction, which is to be held at Indianapolis, May 10-17, 1916. One of the most interesting committees is that on Change of Name, for it has been advocated by some members that a title be selected which more truly indicates the nature of the body, which is the national union of social workers. In preparation for the reception of the Conference at Indianapolis committees have been organized throughout the state for the purpose of making a great exhibit of the progress of Indiana in matters of social welfare during the past one hundred years, as the centennial of her admission to the Union will be celebrated in 1916. Organized social work, both public and private, has been growing by leaps and bounds in this central region, and it has been thought that the record of attendance at the last National Conference (2600) may be more than equalled.

The president, Dr. Francis H. Gavisk, of Indianapolis, has had more than thirty years' experience in social service in that city, and occupies a unique position in that he is the first Catholic clergyman ever to preside over this Conference. The last issue of the *Bulletin* of the Conference is devoted to a review of social legislation during the year 1915. Nearly 500 measures are described and classified, varying in character from the authorization of women police in New Jersey to the establishment of suspended sentences for wife deserters in Hawaii.

#### MEDICAL PREPAREDNESS.

Whatever may be the personal feelings of men in regard to the question of military preparedness for our country, there can be but one sentiment among physicians in respect to the question of adequate medical attendance for the several branches of national defense.

If Congress is going to pass a bill increasing the army and navy there should be provision for the best medical service. Too well do we remember the awful mistakes made in the Spanish-American War, a war which was but a skirmish of outposts compared to what a modern conflict of nations actually is.

The resolutions adopted by the Southern Medical Association at Dallas, Texas, recently are here given.

Whereas, The President and the Honorable Secretary of War have announced in the public press that a scheme for the reorganization of the Army will be presented to Congress at its coming session, which will materially increase the military establishment, and

Whereas, We recall the indignant protests and eriticisms of the Nation at the failure to provide adequately for the sick and wounded at the beginning of the Civil War and the Spanish-American War, and

Whereas, It is known that this failure was due to the lack of a sufficient number of medical officers in the regular army and a means for increasing the medical establishment at the outbreak of war, and

Whereas, In spite of the lessons of the Spanish-American War, which were fresh in mind in the reorganization of the Army in 1901, the Medical Department was not properly increased, and no provision was made for its expansion in time of emergency, and

Whereas, To correct the defects in the 1901 legislation, subsequent legislation was necessary in which the medical profession of the United States was called on to assist.

Therefore, Be It Resolved, By the Southern Medical Association, in session at Dallas, Texas, that the Secretary of War be petitioned to make adequate provision in the reorganization of the Army about to be presented to Congress for a sufficient number of medical officers for the regular establishment, which provision should aggregate a proportion of medical officers of, at least, seventy-five-hundredths of one per cent. of the enlisted

strength of the Army, or such number as the Surgeon-General of the Army may deem necessary, and for service in the Medical Reserve Corps of physicians from civil life who have been instructed in their special duties as medical officers in our Summer Camps, and otherwise as the War Department may see fit.

It is urged upon every man to bring what pressure he can bear upon his Congressman to the end that Congress will adequately provide for trained medical men not only as active officers, but as reserve officers. Heaven forbid that we should ever be drawn into any such frightful cataclysm as is now convulsing Europe. Still if our legislators are bound to increase our military and naval power, they should not forget that no armed force can eampaign successfully without the maximum efficiency of every man. To this end there must be a sufficient number of trained physicians and surgeons who will see that sanitation is properly carried out and that the wounded receive the best of care.

Let there be individual and collective measures directed towards the members of Congress. We are vitally interested in this phase of the situation and we can do much to further the passage of such a bill.

# EXTENDED NURSING SERVICE.

The letter printed below has been sent to the physicians of Milwaukee by the Visiting Nurse Association. This is a move in the right direction. The so-called Hourly Nursing is in operation in many cities and has proved to be a great boon to both patients and physicians. One of the greatest problems which confronts us is that of the care of the great laboring class; the factory workers, clerks, small salaried people. The wealthy can command trained nurses, private rooms in the best hospitals and the very best medical opinion. The pauper has the opportunity of obtaining the best of care and attention at the public hospitals. The middle man is hard put to get the best when he is ill. Trained nurses are expensive and vet how essential is nursing care in most of the ill patients? To have a nurse in only once daily would be a great help in very many cases.

We hope that other cities in the State may develop their visiting nurses association so that it may branch out into this kind of work. There is

no better charity than that which seeks to help people to help themselves.

MILWAUKEE, WIS., October 28th, 1915. Dear Sir:—

The Visiting Nurse Association of Milwaukee take this means of bringing to your attention, a nursing service which we think will be of great benefit to the moderate wage earner, or any member of a moderate wage earner's family.

Although the Visiting Nurse Association has heretofore considered its work among the sick poor of the City to be its natural function, we are at present preparing to offer in addition to this, a new type of nursing service.

Under this service, nurses will be sent to any home where the people are prepared to pay the cost of the visit (75 cents). During the visit the nurse will give such nursing care as the case may require, doctors' orders being fully carried out. If it is a maternity case, mother and babe will be bathed and made comfortable; perhaps some member of the family has had a serious operation at the hospital, returning home the wound still needs to be dressed daily and some nursing care is needed; or some young mother may need advice as to the care and feeding of her small baby.

The nurses are all graduate nurses and are well trained in giving any kind of nursing service in the homes; no contagious cases, however, may be cared for.

The hours of duty are from 8:30 A. M. to 5:30 P. M., each nurse having her own district and twice daily, by telephone, receives calls and instructions from the main office.

The main office will not be open on Sunday, therefore no new cases will be received on Sunday. All Sunday visits will be left to the discretion of the nurse.

Nursing on the visit basis would enable the nurse to give such care as was needed to instruct and train some member of the family or other responsible person to take care of the patient between her visits.

It is hoped in this way to be able to serve that large class of dependent people who require the nursing care, but who do not require the continuous service of a resident nurse in the home.

The Association sincerely hopes that you will give this matter your earnest consideration.

Directors of the Milwaukee Visiting Nurse Association.

# CONGRATULATIONS, ILLINOIS.

It would repay anyone to write to the Illinois State Board of Health, and get a copy of Health News for September. The number is devoted exclusively to tuberculosis. Some may be weary of the name tuberculosis. If so, let them go and find out if they are not victims. Why, the problem is just beginning to be appreciated. Its ramifications go to the roots of our social system. When we get weary of tuberculosis and its alliances, low wages, dirt, bad housing conditions, rents, land taxes, etc., etc., it is time for us to drop out of the running. The world has no need of idlers and croakers. It wants hustlers and boosters.

from 40% to 95% of exposed cattle contract the disease. Very little immunity is conferred and at present we know of no measures to vaccinate cattle successfully against the infection.

Recently Clough\* has reported a case of the disease in a man. The patient was a medical student and the source of the infection could not be discovered although there was foot and mouth disease in the cattle throughout the neighboring country. The vesicles appeared first in the mouth although the feet early showed swelling and redness and itched intensely. On the fourth day of illness small papules occurred on the back of the hand which later developed into vesicles and



-Courtesy of Illinois Health News.

One of the cuts in the News is here reproduced (page 141). No comment is necessary. Let every man who sees it ask himself the question: "Do I do this." If he does, let him mend his ways. If he doesn't, let him not plume himself upon his diagnostic ability.

of the toes peeled almost like the desquamation following scarlet fever. The patient made a complete recovery. We call attention to this as it is quite possible that cases may occur in Wisconsin and we should be on the look-out for them.

pustules. There was marked itching and burning

and tingling of hands and feet. Later the skin

# FOOT AND MOUTH DISEASE.

If some of us have been too busy to read the newspapers for the past few months, at least all must know of the slaughter of Mr. Armour's prize heard of deer and cattle and the fight made by Mrs. Scott Durand to keep her prize herd from being slaughtered. The cause? The dreaded foot and mouth disease which has been epidemic in Illinois for some time.

Like most epizootics the disease is occasionally transmitted to man and while usually mild, may be fatal. The cause is still unknown but it is known that the virus belongs to the ultra-microscopic group of organisms. It is highly contagious,

\*Clough, P. W. Bull, Johns Hopkins Hospital, 1915, XXVI, 351.

# THE PASSING OF A GREAT MAN.

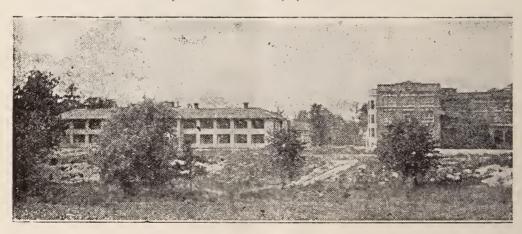
Last month word was received of the death of Dr. E. L. Trudeau, the pioneer in the tuberculosis campaign in this country and the man to whom more than any other, is due the credit for the spread of the Sanatorium idea.

Dr. John Huber in his splendid book "Consumption and Civilization" calls attention to the great influence on the world's work and thought by men and women who fought for health while they were dreaming and writing great thoughts. To these heroes Dr. Trudeau rightly belongs. Given up as a hopeless consumptive, doomed to die in 1884, his

wife took him to the Adirondacks during the winter and they lived "next to nature". In the spring he was so much better that he began to plan in earnest the dreams which came to him through the long winter. The result was the Adirondack Cottage Sanatorium supported by friends in New York and designed for working people afflicted with tuberculosis. Very early were brilliant young men attracted to Dr. Trudeau's side. Some, in fact most of them, were tuberculous like him. A worldwide reputation has been the reward of him and his associates and a consciousness of having added not only to the world's knowledge but to broad humanity. To have known Dr. Trudeau was to love him. His was a genial, kindly nature with the silent fires of constant enthusiasm burning in his eyes. If his life is a stimulus to all of us as men, it must be a wonderful example to the suf-

attention is given to ventilation of the rooms in which the bed cases will be placed. The main hospital building is constructed with two wings in each of which is a receiving ward. Patients are placed in these wards temporarily until an accurate diagnosis determines whence they will be ultimately put. In the three stories of this building are rooms of various size. Sun parlors and large sleeping porches are on every floor. Two forty-patient cottages are designed to accommodate the convalescent patients.

Work is planned as a therapeutic agent. The proximity of the hospital to the cottages should be a stimulus to the ill ones to get better, and to those in good condition, to keep improving. We believe this is the most satisfactory plan. There will be a clinical laboratory and a complete X-ray equipment.



ferer from tuberculosis. Given up to die thirtyone years ago and what a full thirty-one years has that been!

Colleagues, to have had such a man in our profession should make us proud of our brotherhood with him. Although he is dead his spirit can never die but will flame on and on, leading others upwards to higher and better things.

# MILWAUKEE COUNTY'S NEW SANA-TORIUM.

Last month the new \$750,000 Sanatorium for the tuberculosis sufferers of Milwaukee County was opened for patients. We doubt if any community in the country can show such a complete and well-equipped institution. All buildings are of brick and of fire-proof construction. Especial At present the hospital will accommodate 275 patients. It is planned to increase the capacity up to 500 as the demand for space grows. Plans for new buildings are already drawn so that building can begin whenever it is felt that the capacity is continually being exceeded.

The new Sanatorium is called "Muirdale". It is about eight miles from the city of Milwaukee on a broad asphalt boulevard. The situation is fine, it is accessible without being too near the city.

We wish for Dr. G. L. Bellis, the Superintendent, and his associates every measure of success in the policy laid down by him—"to extend to every patient every opportunity to recover from his disease. Rest, fresh air, proper food, and exercise scientifically prescribed, together with the administration of such medicines and surgical procedures as have been found of value in the treatment of tuberculosis, are here provided. It is intended

that the institution shall also serve as a center for the further study of tuberculosis, its prevention and cure, and fulfil as far as may be possible the purposes for which it was designed and constructed."\*

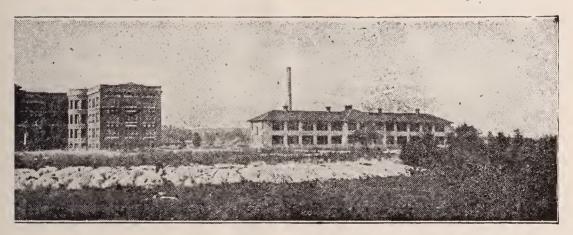
\*The Crusader, Oct., 1915.

#### PELLAGRA.

All of us have not lived in the South and can not therefore appreciate fully the immense importance of the recent discovery of the probable cause and actual cure of one of the most dreaded of diseases. When in 1907 it was found that Pellagra was scattered widely throughout the South, and even in Illinois particularly at the Insane Asylum in Peoria, an intensive campaign was started to dis-

the disease. The so-called Zeist theory which lays the cause to poor or decayed cornmeal and the parastic theory championed chiefly by Sambon which supposes that gnats are carriers of an infection. There have been volumes written by the Zeists. The infectious theory has never been very seriously entertained.

Recently Goldberger and Wheeler of the Public Health Service have shown that pellagra is caused by a restricted, one-sided, mainly carbo-hydrate (cereal) diet, or by an insufficient protein diet. The experiments were carried out at a convict camp near Jackson, Mississippi. The Governor offered to pardon twelve convicts who volunteered as subjects for experiment. One of these later became ill and hence eleven were available. The experiments were carefully controlled. Prior to the commencement of the experiments no history



-Courtesy of The Crusader.

cover the cause. In Italy the disease has been known for years but the recognition of it in this country came as a surprise. That it had been long among us is quite probable. It was evident, however, that there was a sudden, marked increase in the number of cases in the few years prior to 1907. In the light of recent discoveries is it not probable that the rapid industrial development, with the increased cost of living and the low wages paid to factory hands in the South had much to do with the increased incidence?

Pellagra has undoubtedly been increasing at an alarming rate throughout the country during the past eight years. The Public Health Service estimates that 75,000 cases will have occurred in 1915, of which 7,500 will have died before the end of the year. In many sections only tuberculosis and pneumonia exceed it as a cause of death. At least two main theories have been advanced to explain

of the occurrence of pellagra on the farm could be obtained. The convicts all lived under the same conditions, drank the same water, and the food was prepared the same. The essential difference in the food, which was plentiful and of the best quality, was that the experimental group received no meat. The diet consisted of biscuits, fried mush, grists and brown gravy, syrup, corn bread, cabbage, sweet potatoes, rice, collards and coffee with sugar.

They were kept under observation on a general diet from February 4th to April 9th in order to determine if they were afflicted with any disease. The one-sided diet was then begun.

Rather early nervous symptoms and gastro-intestinal disturbances occurred but it was not until September, five months after the beginning of the diet that the characteristic skin symptoms developed in six convicts. These were the only cases which developed. The controls remained absolutely well.

Looking back now on the conditions under which the poor population of the South has lived for the past ten years, we are prone to accept readily these results of Goldberger and Wheeler. Surely just such conditions as produced pellagra in these patients have obtained throughout large districts in the South. Meat is expensive, milk is not readily obtained as the dairy industry is insignificant, poultry is not kept by the people in the country districts. Protein food was not available so the population lived on corn bread and sweet potatoes.

Much work is yet to be done before the actual element which is lacking is discovered. The disease however, may now be controlled, if lack of protein is the cause, and many lives spared. Pellagra comes in the same class as beri-beri and scurvy, all nutritional diseases.

Already the states of Mississippi, Louisiana and Florida have started a propaganda to eradicate pellagra on the basis of the recent findings. We shall await with interest the outcome of this campaign which should confirm or deny the nutritional origin of the disease.

#### ANTITOXIN IN DIPHTHERIA.

We, of the present generation, are apt to look with complaisance upon the striking figures of the mortality tables in the pre- and post-antitoxin days. It is only the men in active practice before 1895 who look back with shudders at their helplessness and then breathe a great sigh of relief when they contemplate the present situation, who have full realization of the boon to humanity of Behring's discovery. In one state (New York) the diphtheria death rate in 1894 was 99 per 100,000 of population; in 1914 it was 20 per 100,000. It is generally agreed that this could be reduced even lower if antitoxin were administered early and correctly.

We say "correctly" because the mere introduction of antitoxin into the subcutaneous tissues is not always the right way to administer the antitoxin. It is probable, according to W. H. Park, that 100 units of antitoxin would be sufficient to neutralize the toxin in the most severe case. But the fact is that this amount cannot be immediately available to the tissues and we must employ the mass action of many times 100 units in order for

a sufficient amount of antitoxin to reach and neutralize the toxin.

Furthermore, the absorption from the subcutaneous tissues is very slow. It takes even a day for the major part of the antitoxin to be absorbed into the blood and the greatest accumulation of antitoxin in the blood is on the third day after a subcutaneous injection. It is perfectly apparent that this is not the ideal way to get antitoxin into the blood. As a matter of fact it is the poorest method. Absorption from intramuscular injection is very much more rapid. The most rapid and surest method is the intravenous injection. This, however, takes some special skill and in children may be quite difficult. It is not impossible.

Another important question is the dose. Shall there be several moderately large doses given at intervals or is one large dose preferable? In this connection Dr. Park says,\* "It must be realized that antitoxin has no effect whatever on injury which has already taken place. If the toxin is firmly united with the cell substance, antitoxin is no longer of any service. It is the early and sufficient dose which is important. When we give a divided dose we get the effect of the first portion only, during the interval before the giving of the second dose. If the first dose was insufficient, we lose the effect of the part reserved for the second dose. When the first dose has been of a sufficient size, the second and third injections, though harmless, are absolutely useless."

The judgment of one who has had such large experience as Dr. Park has had should lend the weight of authority to his statements. He gives a single large dose at the earliest possible moment, subcutaneously in mild eases, intramuscularly in moderately severe cases, and intravenously in the malignant cases.

We give his table of doses feeling certain that this represents the best practice in the administration of antitoxin and will be helpful to physicians when forming judgment of how much antitoxin is necessary.

Single dose only.

Infant 10 to 30 lbs. (under 2 years).

Mild Moderate Severe Malignant 2.000-3,000 3.000-5,000 5.000-10,000 10,000

Child 30 to 90 lbs. (under 15 years). 3,000-4,000 4.000-10,000 10,000-15,000 15,000-20,000

\*Park, W. H., Health News, Monthly Bulletin New York State Department of Health, November, 1915. Adult 90 lbs. and over.

3,000-5,000 5,000-10,000 10,000-20,000 20,000-40,000

Method of Administration.

Subcutaneous Intramuscular Intravenous Intravenous or or Intramuscular Subcutaneous Intramuscular

It will be seen that in only the mild cases it is recommended that the antitoxin be given subcutaneously. Even then the intramuscular method is preferable. The buttocks or thighs are the sites for intramuscular injection. The needle is held perpendicularly to the skin and quickly plunged into the muscle. It is less painful, as a rule, than the subcutaneous method.

#### NEWS ITEMS AND PERSONALS

Dr. A. J. Pullen, Fond du Lac, who underwent an operation for appendicitis on November 15 has recovered.

Dr. Robert E. Flynn, La Crosse, was re-elected county physician for La Crosse County on November 13th.

Dr. Arthur J. Patek, Milwaukee, who recently underwent an operation for appenticitis has recovered.

Dr. C. W. Morter, Milwaukee, is ill at Mt. Sinai Hospital, suffering from blood poisoning of the left arm.

Dr. J. L. Yates, Milwaukee, is visiting the eastern hospitals, and will return to Milwaukee about December 15.

Dr. J. A. Mack, Madison, is convalescing at the Madison General Hospital after two operations performed recently for appendicitis.

Suit against Drs. W. A. Henke and B. W. Mast and the La Crosse Hospital Association, to recover damages in the sum of \$5,000, has been started by George Morrison of Vernon County, for alleged malpractice in connection with an operation for appendicitis.

Dr. Geo. Senn, De Pere, who was operated upon at Johns Hopkins Hospital, Baltimore, on November 9th, is convalescing.

Dr. Effie Vanderlinder, Beloit, was badly hurt on November 8, when she fell down the stairway at her home. She sustained internal injuries and a badly wrenched back.

DR. GEO. C. RUHLAND, Milwaukee, has been elected a director of the American Association for the Study and Prevention of Infant Mortality, at its convention recently held in Philadelphia. The next meeting of this association will be held in Milwaukee in 1916.

The jury in the case of Dr. F. N. Sauer, Milwaukee, who was sued for damages to the extent of \$10,000 by Mrs. Theressa Krippel, returned a verdict of \$3,000 for the plaintiff. Dr. Sauer is accused of performing an unnecessary operation. It is believed he will demand a new trial.

DR. HENRY R. CARTER, famous yellow fever expert of the United States Public Health Service, is reported to be dying in Porto Rico from dengue. While working to stamp out the disease he fell a victim to it.

Dr. Albert F. Young, county physician for the east side district, Milwaukee, was elected superintendent of the Milwaukee Hospital for the Insane, to succeed Dr. Moses J. White; Dr. F. M. Schulz was re-elected superintendent of the Milwaukee County Hospital and Dr. William Beutler re-elected superintendent of the asylum for the chronic insane, at a recent meeting of the Milwaukee County Board of Administration.

Drs. Sherman T. Lewis, Joseph H. Wallis and Arthur H. Little, Milwaukee, have been served with notices that action will be started in circuit court, on December 16th, to revoke their licenses. The physicians were recently tried on charges of performing criminal operations and were acquitted.

Dr. F. X. Schaeffer, formerly of Milwaukee, convicted on a charge of manslaughter May 16, 1914, was denied a pardon by Gov. Philipp.

MARATHON COUNTY on November 11, passed a resolution appropriating \$50,000 for a new county tuberculosis sanatorium.

"Willow Brook," Kenosha County's new tuberculosis sanatorium, will be opened to patients on January 1, 1916. The county expended \$60,000 on its construction and equipment. MUIRDALE, Milwaukee County's new sanatorium for tuberculosis at Wauwatosa, was dedicated on November 21. The capacity of Muirdale is 250 patients. It is stated that next year the county board will build cottages so that 500 patients may be accommodated.

BAYFIELD, WISCONSIN, has an epidemic of typhoid fever, said to be due to the drinking water. The hygienic laboratory analysis of Bayfield water indicated contamination by colon bacilli.

Chicago has 7,000 tubercular children, according to the report of Dr. John Dill Robertson, commissioner of health of that city.

Several cities of the state are contemplating ordinances prohibiting suspected typhoid earriers from handling milk or milking utensils. Columbus and Grantsburg, where typhoid carriers have been found in the past, have asked the state board of health for information. A tentative ordinance has been submitted to the attorney general.

The proposed ordinance provides that it shall be unlawful for any person who has recently suffered from typhoid fever or diphtheria, or who is suspected of being a typhoid or diphtheria carrier, to milk cows, wash or care for milk utensils, or handle in any manner milk or cream sold or offered for sale, until repeated examinations of such individual have proved that he or she is not a carrier of such disease.

Health Commissioner, Geo. C. Ruhland, Milwaukee, is getting estimates on the cost of a plan to post health bulletins in public places throughout the state. It is also announced that the health department lectures the first and third Fridays of each month, will hereafter be open to the public.

Beginning with the January, 1916, number, The Journal of Cutaneous Diseases, including Syphilis, will be published for the American Dermatological Association by W. M. Leonard, Boston. Each number will contain 80 pages, and, as far as possible, be of interest and value to the general practitioner as well as to the dermatologist.

# REMOVALS

Dr. Frank Drake, Waupun to Mendota.

Dr. H. E. Gillette, Amhurst Junction to Packwaukee.

Dr. W. H. Lewis, Antigo to Fond du Lac.

Dr. W. E. Miller, Shawano to Green Bay.

Dr. G. F. Kenney, Thiensville to Milwaukee.

Dr. A. M. Cox, Auburndale to Chicago.

Dr. W. L. Thompson, Oakfield to Sheboygan.

Dr. G. H. Schluesselman of Tomah is contemplating removing to Lomira.

Dr. Arthur J. Williams, recently of St. Mary's Hospital, Milwaukee, has opened an office at Waukesha, for the practice of his profession.

#### OBITUARIES.

Dr. John Sutherland, formerly of Appleton, died at his old home, Glasgow, Scotland, on Oct. 11, 1915, aged 90 years. Dr. Sutherland practiced at Appleton for about twenty years, returning to Scotland about 1878.

Dr. H. C. Block, Milwaukee, died at his home on November 11, 1915, aged 63 years. Dr. Block was born in Germany and came to this country in 1873, taking up the study of medicine in Chicago. In 1885 he graduated from the Chicago Homeopathic Medical College, and shortly after located at Milwaukee.

Dr. A. C. Kellogg, Portage, aged 70 years, one of the oldest practitioners of the state, who came to Wisconsin in 1852 and settled in Dodge County, died after several months' illness following a stroke of apoplexy on November 2, 1915. He had practiced at Portage since 1870, being a graduate of Belleview Hospital Medical College. He was formerly a member of the Democratic State Central Committee and was superintendent of the Portage public schools for many years. He was a member of Columbia County and the State Medical Societies.

Dr. Nathanael A. Gray, one of Milwaukee's best known physicians a resident of the city for sixtyone years, died at Mount Sinai Hospital on November 25, 1915, of pneumonia, afted 74 years. Dr. Gray has been in ill health for eight years. Dr. Gray was born in Jamestown, N. Y., March 8, 1841. His father, Dr. A. W. Gray, a physician during the early days of Milwaukee, brought his family there in 1854. Dr. Gray was for many years a trustee for the Northern Hospital for the Insane at Winnebago. He was a member of Milwaukee County and the State Medical Societies.

Dr. H. E. Hasse, a former Milwaukee physician, and an authority on botanical subjects, died on October 31, 1915, at his home in Santa Monica, Cal., aged 79 years. Dr. Hasse, although he left Milwaukee twenty years ago, is well remembered by the earlier residents.

He was born in Freiburg, Saxony, Germany, in 1836. He same to America with his parents in 1845. Dr. Hasse received his medical education at Prague, Leipsig and Wurzburg. Upon his return to Milwaukee, at the beginning of the Civil War, he enlisted in the Twenty-fourth Wisconsin regiment as chief surgeon, with the title of major. He removed to Little Rock, Ark., in 1885 and later to Santa Monica, Cal., where he was chief surgeon in the Soldiers Home for several years. Upon his retirement from active practice, nine years ago, he devoted himself to botany. He was an international authority on lichens, and author of a Smithsonian publication on lichens.

#### THE DOG AS A CARRIER OF DISEASE TO STOCK.

The dog in the country is a useful and pleasant adjunct to the farm if he is properly controlled and cared for, but when neglected, may readily become a carrier of disease to stock, in addition to gaining opportunity to kill sheep and destroy gardens and other property. Dog ordinances, as a general rule, have been intended chiefly to curb the dog's power of doing harm by attacking, biting, killing or running sheep or stock. The part that he plays as a carrier of diseases to animals only recently has been recognized, according to the zoologists of the Department of Agriculture, who believe that when this is better understood, rural ordinances and laws which lessen this danger will gain the support of the community.

Of the diseases carried to stock by dogs, the foot-and-mouth disease is probably of the greatest interest at this time. In this case the dog acts as a mechanical carrier of infection. The dog which runs across an infected farm easily may carry in the dirt on his feet the virus of this most contagious of animal diseases to other farms and thus spread the disease to the neighboring herds. In infected localities it is absolutely essential, therefore, to keep all dogs chained and never to allow them off the farm except on leash.

There are, however, many other maladies in the spread of which the dog takes an active part. In Bulletin 260 of the United States Department of Agriculture, "The Dog as a Carrier of Parasites and Disease," it is pointed out that rabics, hydatid, ringworm, favus, double-pored tapeworm, roundworm, and tongueworm are often eon-veyed to human beings in this way. It occasionally happens also that the dog helps fleas and ticks in transmitting bubonic plague or the deadly spotted fever.

Hydatid disease is caused by the presence in the liver, kidneys, brain, lungs, and other organs, of a bladder worm or larval tapeworm. Bladder worms are often as large as an orange and may be larger. A dog which is allowed to feed on carrion or the raw viscera of slaughtered animals may eat all or part of a bladder worm containing numerous tapeworm heads. These tapeworm heads develop into small segmented tapeworms in the intestines of the dog. The tapeworms in turn develop eggs which are passed out in the excrement of the dog. They are spread broadcast on grass and in drinking water where animals can very well eat them and thus become infected. The hog is particularly liable to this disease because of its rooting habits. The eggs may get into human food, and persons who allow dogs to lick their hands and face also run the risk of getting the eggs of the tapeworm in their systems.

Prevention on the farm consists in so restraining the dog that he can not get at carrion or raw viscera. Viscera should be boiled before being fed to dogs and should never be thrown on the fields. If not cooked and fed, viscera and carcasses should be burned, buried with lime, or so disposed of as not to be accessible to dogs. Proper feeding of the dog is essential, and the owner who does not feed a dog properly has no right to keep one.

The parasite which causes gid in sheep somewhat resembles the hydatid worm. A dog allowed to eat the brain of a giddy sheep may swallow this parasite and later distribute the eggs of the resulting tapeworm over the pasture. Sheep while grazing swallow the eggs with the grass which they eat. In the case of sheep dogs it is important to administer vermifuges often enough to keep them free of these worms. In the case of sheep measles, the bladder worm in the meat, typical of this disease, is swallowed by the dog and again the tapeworm eggs are passed by the dog to grass or water, and there are eaten by sheep.

Of the external parasites which dogs may carry to animals, fleas and the various kinds of ticks are both troublesome and dangerous. The remedy is clear. The owner must keep his dog clean, not merely for the comfort and happiness of the dog, but to prevent it from becoming a carrier of disagreeable and dangerous vermin.

These reasonable measures, important to the stock on the farm, have a direct connection with the health of the family. Where ringworm or other skin diseases break out among the children, or the worm parasites develop, it is well to determine whether a dirty or uncared-for dog may not be carrying infection on his skin or hair, or be conveying disease from carrion directly to the food and persons of his friends. Even if no one is infected with disease, the folly of allowing a dog to remain dirty and have the freedom of a home where personal cleanliness and hygiene are respected, is apparent.

U. S. Dept. Agriculture.

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

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# NEXT ANNUAL SESSION, MADISON, OCTOBER, 1916.

The Wisconsin Medical Journal, Official Publication

# LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

County.	President.	Secretary.
Ashland-Bayfield-IronM.	S. Hosmer, Ashland	
Borron-Polk-Woshhurn-Sawver-BurnettG.	N. Lemmer. Spooner	A. S. White Rice Lake
'Prown Kowannoa W	. H. Bartran, Green Bay	II C Mix Green Rev
Calumot	L. R. McCollum, Forest Junction	F. J. Fechter New Holstein
Chippews	C. Nussle, Chippewa Falls	A. L. Beier, Chinnews Ealls
Clark	H. Christofferson, Colhy	E. L. Bradbury, Neillsyllle
Columbia	O. Foree. Pardeeville	A. F. Schmeling, Columbus
Crawford	B. Lumsford, Gays Mills	A. J. McDowell. Soldiers Grove.
Dane	S. Sheldon, Madison	L. H. Prince, Madison,
DodgeR.	E. Bachnuber, Mayville	E. S. Elliott, Fox Lake.
Door H. Douglas W	F. Eames, Egg Harbor	T. C. Proctor, Sturgeon Bay.
Douglas	E Butler Menomonia	D. R. Searle, Superior,
Douglas Dunn-Pepln Eau Claire	S Cook Fan Claire	D. F. Mitchell Fan Claim
Fond du Lac.	J. Pullen, North Fond du Lac	H C Werner Fond du Lee
GrantE.	MaeDonald Cuba City	U R Glasier Bloomington
Croon	B. Gnagi. Monroe	L. A. Moore Mouroe.
Green Lake, Washara-Adams	E. Baldwin, Green Lake	F. R. Sllverthorn, Berlin.
Lowe G.	11. McCallister, Avoca	J. R. Hughes, Dodgeville.
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La CrosseH.	. E. Wolf, La Crosse	J. M. Furstmann. La Crosse.
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Plerce	artln Oven, Ellsworth	R II Calrns River Fails
Portage	. W. Gregory, Stevens Polnt	W F. Cowan Stevens Point.
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Welmonth	E Midgley Whitewater	Edward Kinne Eikhorn
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Waykosha	I Woodhead Merton	S. B. Ackley, Oconomowoc.
Wayness	A .lefferson Clintonville	G T Dawley New London
Winnehago	irton Clark Oshkosh	H. W. Morgenroth, Oshkosh.
WoodH	ugh F. Waters, Nekoosa	W. G. Merrill, Grand Rapids.

#### COUNTY SOCIETY MEETINGS

#### DOUGLAS COUNTY

The regular monthly meeting of the Douglas County Medical Society was held at the Superior Commercial Club, Superior, on November 3rd, 1915. A report by the State Laboratory Committee was made, and papers were read by Drs. C. H. Mason and G. H. Conklin.

## EAU CLAIRE COUNTY

Eau Claire County Medical Society met at Eau Claire on October 25th, 1915. Dr. J. B. Ziegler was elected to membership. A Symposium on Asthma was presented as follows. "Etiology, Pathology, Diagnosis," Dr. Joseph C. Baird; "The Internist and Asthma," Dr. J. E. B. Ziegler. "The Specialist and Asthma," Dr. F. S. Cook; "The Surgeon and Asthma," Dr. R. F. Werner; "The Auto Vaccine Treatment of Asthma," Dr. L. H. Flynn. Supper was served at the Galloway House at 7:15.

R. E. MITCHELL, Secretary.

#### FOND DU LAC COUNTY

The annual meeting of the Fond du Lac County Medical Society was held at the office of Dr. H. C. Werner, Fond du Lac, and the following officers were elected: president, Dr. A. J. Pullen, North Fond du Lac; vice-president, Dr. F. M. McGauley, Fond du Lac; secretary-treasurer, Dr. H. C. Werner, Fond du Lac; censor, Dr. J. M. Baasen, Mt. Calvary.

The society adopted a medical fee bill for the purpose of sending it to the Wisconsin Industrial Commission, which body is engaged in preparing a uniform fee bill to be used in settlement of cases growing out of the operation of the compensation act.

The society also decided to increase its activity along the lines of public health and sanitation, and in order to get a good start in the movement is planning a public meeting to be held in the near future, at which prominent men in the county will be speakers.

#### **GRANT COUNTY**

A session of the Grant County Medical Society was held at Lancaster, on November 8, 1915. The meeting was called on this date to concur with the session of the county board, as the Grant County Tuberculosis project came before them at this time. A dinner was served at the Wright House and was followed by a Smoker at the Country Club rooms where the meeting was held. Dr. T. L. Harrington, Milwaukee, member of the executive committee and vice-president of the Wisconsin Anti-Tuberculosis Association gave a splendid talk on the Advantages of having County Sanatoria. A free discussion followed the giving of this very able address, and questions were answered by Dr. Harrington relating to this subject.

Dr. N. E. McBeath, of Livingston, read a paper telling of the needs of a sanatorium in Grant County, sup-

porting his statements by facts and figures obtained from reliable sources,

There were present: Drs. J. C. Betz, S. W. Doolittle, J. C. Doolittle, Ed. McDonald, Jos. Godfrey, N. E. McBeath, J. H. Fowler, James Orr, H. J. McLaughlin, M. A. Bailey, J. E. Heraty, E. C. Howell, F. H. Baldwin, J. M. Lewis, C. M. Schuldt and M. B. Glasier. Dr. T. L. Harrington of Milwaukee was the guest of the society.

Election of officers resulted as follows: president, Dr. N. E. McBeath of Livingston; vice-president Dr. C. H. E. Wheeler of Platteville; secretary-treasurer Dr. M. B. Glasicr, Bloomington; censor, Dr. H. J. McLaughlin, Glen Haven; delegate, Dr. J. C. Betz, Boscobel; Alternate, Dr. M. A. Bailey, Fennimore.

A unanimous vote of thanks was extended to Dr. Harrington for his very able address at this time.

The next meeting will be held in Lancaster in January.

M. B. GLASIER, Secretary.

#### OSHKOSH MEDICAL CLUB

The regular meeting of the Oshkosh Medical Club was held on November 24, 1915, at the Hotel Athearn. Prof. Charles L. Mix of the University of Chicago delivered a lecture on "Diagnosis of Ulcer of the Stomach." A Dinner was served after the meeting.

#### WAUKESHA COUNTY

The Waukesha County Medical Society at its November meeting held on the 8th at the Waldheim Sanatorium, Oconomowoc, unanimously voted to present a resolution to the board of supervisors asking that a tuberculosis sanatorium be provided by the county. The society also endorsed the proposition of employing a county visiting nurse, which matter will also be presented to the board.

#### WINNEBAGO COUNTY

Winnebago County Medical Society met on Oct. 28, 1915, at the office of Drs. Smith and Donovan, Neenah. Dr. T. H. Hay, Stevens Point was guest of honor, and addressed the society on "Tuberculosis, Its Diagnosis and Treatment in the Incipient and Early Stages." After the meeting a lunch was served at the office. The attendance was thirty-five.

#### WEST WISCONSIN DISTRICT

The twelfth annual meeting of the West Wisconsin District Medical Society was held at Eau Claire, November 4, 1915. Surgical Clinics were held at Sacred Heart and Luther Hospitals. Drs. J. V. R. Lyman, E. L. Mason, E. S. Cook, A. L. Payne and C. Midlefart were in charge of the operations. At twelve o'clock sixty visiting physicians were the guests of President E. L. Mason and Secretary L. H. Flynn at luncheon at the Galloway House. At 2 P. M. the meeting was called to order at the Library by the president, Dr. E. L. Mason, and the following program presented: "Unrecognized Dilitation of the Heart," Dr. Charles Lyman Green, St.

Paul; "Vaginal Drainage," Dr. Frederick J. Plondke, St. Paul; "Calcium Treatment of Spasmophilia," Dr. Julius Parker Sedgewiek, Minneapolis; "Treatment of Prostatie Hypertrophy," Dr. D. J. Hayes, Milwaukee; "Study of Results to be Obtained in Surgery of Brain Tumors," Dr. Allen B. Knavel, Chicago; "Two Obstetrie Measures that Save Life," Dr. David S. Hillis, Chicago; "Fracture of Os Caleis" (Lantern Slides), Dr. B. P. Lounsbury, Chicago.

An elaborate banquet was served at the Eau Claire Club at 8 o'clock in the evening, one hundred and seventy-five physicians being present. With music, song and professional vaudeville entertainment, the evening passed all too quickly.

The officers for the ensuing year are: president, R. F. Werner, and secretary, J. E. B. Ziegler.

L. H. FLYNN, Secretary.

# **BOOK REVIEWS**

THE PRACTITIONER'S VISITING LIST FOR 1916. Four styles: weekly, monthly, perpetual, sixty-patient. Poeket size; substantially bound in leather with flap, poeket, etc.; \$1.25, net. Lea & Febiger, Publishers, Philadelphia and New York.

This convenient little list again comes to hand. It is just as attractively made, just as serviceable and as valuable as it always has been. We can recommend it to the profession.

INFANT FEEDING, ITS PRINCIPLES AND PRACTICE. By F. L. Wachenheim, M. D., Attending Physician Sydenham Hospital and Mount Sinai Dispensary, New York City. 12mo, 340 pages. Cloth, \$2.00, Net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

In this manual which is "designed to supply the practitioner with a reference hand-book, of moderate size, in which he may find an exposition of the present theory and practice of infant feeding." Dr. Wachenheim presents a well-digested survey of the field. It is a timely volume, for the conflicting masses of current literature, especially foreign literature, on the subject need to be passed through the critical censorship of clinical experience in America before the theories thus advanced can be accepted as a part of our effective medical equipment. The volume is divided into chapters on Infantile Digestion and Metabolism, Breast-feeding. Cow's Milk, Milk Modification, Other Infant Foods, Artificial Feeding. Disorders of Metabolism, Rickets and Seurvy, and the Feeding of Older Infants.

Dr. Wachenheim writes out of the fullness of a large experience and presents his individual views with clearness and vigor. His attitude towards both the older and newer schools of teaching in infant feeding is one of wholesome conservation, independence, and reasonableness, so that the volume well repays reading.

YOUR BABY. A Guide for Young Mothers. By Edith B. Lowry, M. D. 8vo, 253 pages. \$1,00, net. Forbes & Company, Chicago.

This is one of a number of books dealing with the important subject of maternity. The author, being a woman, speaks from the woman's view-point. She has written a safe and sane book, not technical, but interesting and one which it would be well for every young woman to read carefully. The cost is moderate. It deserves a wide circulation and the Reviewer hopes that this will be the case.

A Text-Book of Pathology. By Alfred Stengel, M. D., Professor of Medicine, University of Pennsylvania, and Herbert Fox, M. D., Director of the Pepper Laboratory of Clinical Medicine, University of Pennsylvania. Sixth Edition, Reset. Octavo of 1045 pages, with 468 text-illustrations, many in colors, and 15 colored plates. Cloth, \$6.00, net; Half Morocco, \$7.50, net. W. B. Saunders Company, Philadelphia and London, 1915.

Any text-book which goes through several editions must have some special merit and must be a help to many men. A text-book on Pathology to be complete, must cover an enormous ground. Teachers of the subject complain that there is no manual which can be put into the hands of students which is adequate in most essentials. Of the books on Pathology no one is quite satisfactory from the pedagogic standpoint.

A criticism which has been made against Dr. Stengel's book, is that it is neither Internal Medicine or Pathology, but a combination of the two. It is thus not used by many teachers of Pathology. Then too, strictly pathological subjects and descriptions are not taken up at length. That seems unavoidable when an attempt is made to compress into a single volume of 1,000 pages all the facts of the great subject.

In this new 6th edition, Dr. Herbert Fox has collaborated with Dr. Stengel. The whole book has been reset and much new material has been added. The chapter on Technic which has heretofore been included in all the editions has been omitted. This is a wise move, it seems to the Reviewer. The arrangement is somewhat different. There are still the two great divisions. Part I, General Pathology, and Part II, Special Pathology, but the opening chapters are—I, The Etiology of Disease; II, Disorders of Nutrition and Metabolism; III, Disturbances of the Circulation of the Blood; IV, Retrogressive Processes. Then comes, Inflammation and Regeneration, Progressive Tissue Changes including a discussion of tumors, etc.

To single out points to criticize in such a work would show pucifity on the part of the Reviewer. Naturally he does not agree with all the ideas expressed and naturally he thinks that certain sections might have been made more full and explanatory. Viewed as a whole the book is excellent and to be recommended to the student as an aid to his lectures. The figures are well chosen and well excented. Some indeed are truly artistic.

We think this edition should have a wide popularity. The text is beautifully printed; a splendid example of the book-maker's art.

THE CLINICAL ASPECT OF EMBOLISM OF THE CENTRAL RETINAL ARTERY PRODUCED BY RUPTURE OF THE ARTERY IN THE STEM OF THE OPTIC NERVE IN BRIGHT'S DISEASE. Velhagen, C., Chemnitz, (Klin. Mon. f. Aug., 54, p. 676), gives the clinical history of a woman, aged 26, who suddenly became blind in her right eye, presenting the typical aspect of embolism of the central artery. Death after five weeks from Bright's disease. The autopsy and microscopical examination of the eye revealed as the cause of the sudden closure of the central retinal artery a rupture of its wall and a hematoma, which under the resistance of the surrounding tissue of the optic nerve compressed the lumen of the vessel to such an extent that the picture of embolism of the central artery resulted. The simultaneous thrombus of the central vein was secondary and must be considered as marantic or due to stagnation. The hemorrhage was attributed to the chronic hemorrhagic nephritis. This was rendered more probable by the inflammatory changes of the central retinal artery within the lamina cribrosa and its retinal branches as often found in albuminuric C. Z. retinitis.

ON WAR INJURIES OF THE EYE AND OCULISTIC ATTENDANCE OF THE TROOPS. Birch-Hirschfeld, A., Koenigsberg, (Zeitchr. f. Aug., 33, p. 266), gives a very good synopsis of his observations of injuries and diseases of the eye during the war and emphasizes the importance of providing the troops with consulting ophthalmologists, not only for the proper treatment of eye injuries but also for increasing the efficiency of the men in the field by refractometric examinations and ordering and supplanting of proper glasses, and gives recommendations for such organizations.

C. Z.

THE PRINCIPLES OF BACTERIOLOGY. A Practical Manual for Students and Physicians. By A. C. Abbott, M. D., Professor of Hygiene and Bacteriology and Director of the Laboratory of Hygiene, University of Pennsylvania. 12mo, 650 pages, with 113 illustrations, 28 in colors. Cloth, \$2.75, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The new edition of this manual measures up fully to the high standard of those that have gone before. The subject matter has been carefully gone over and has been brought abreast with what is best in a rapidly developing field of science. Some chapters have been completely rewritten.

Excellent judgment has been used, especially in the treatment of the subject of "Infection" and the "Defenses of the Body." Such new matters as relating to hemolysis, complement-fixation, and the Ehrlich conception of the nature of immunity, are handled with the knowledge of an expert teacher who knows how to select and present the essential out of the confusing maze of detail.

A MANUAL OF PERSONAL HYGIENE: Proper Living Upon a Physiologic basis. By American Authors. Edited by Walter L. Pyle, M. D., Philadelphia. Sixth Edition, Revised and Enlarged. 12mo of 543 pages, 138 illustrations. Cloth, \$1.50, net. W. B. Saunders Company, Philadelphia and London, 1915.

How to develop and maintain a healthy mind and a healthy body is the purpose of this manual. Each chapter is written by a master who discusses his special subject in a concise yet adequate manner. The hygiene of the digestive apparatus, of the skin and its appendages, of the vocal and respiratory apparatus, of the eye and ear, of the brain and nervous system, are some of the subjects discussed. Other chapters deal with physical exercise, body posture, domestic hygiene and food-adulteration and deterioration. A new chapter on the hygiene of infancy has been added. An appendix giving exceedingly practical and valuable advice on baths, packs, douches, massages, accidents, poisonings and their treatment concludes the book, the reading of which we would recommend most urgently to layman and physician alike.

A Text Book of Surgery for Students and Practitioners. By George Emerson Brewer, A. M., M. D., Professor of Surgery, College of Physicians and Surgeons, New York; Surgical Director, Presbyterian Hospital; Consulting Surgeon, Roosevelt Hospital, assisted by Adrian V. S. Lambert, M. D., Associate Professor of Surgery, Columbia University; Attending Surgeon, Presbyterian Hospital; and by members of the surgical teaching staff of Columbia University. Third edition, thoroughly revised and rewritten. Octavo, 1027 pages, with 500 engravings and 23 plates in colors and monochrome. Cloth, net, \$5.50. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The author or editor who sets before himself the task of making a single volume covering the subject of present day surgery in one thousand pages has no easy undertaking. In the volume before us, however-which now appears in its third edition—the undertaking has been most admirably accomplished by Brewer and a corps of fourteen assistants who are to be congratulated upon the production of an almost ideal students' text; the general practitioner and the experienced surgeon will also find it a valuable book of reference and so well written that its reading will be a delight and satisfaction. The call for a new edition has given the distinguished editor the opportunity for a very careful revision of the work-chapters have been rewritten and new chapters added-recent advances noted, and as tried and proven, are incorporated in the text. The illustrations, too, deserve particular mention; no recent book on Surgery contains so many new-really new-illustrations, and a number of full-page colored plates reproduced from Lumiére photographs not only admirably depict interesting clinical conditions but also are almost works of art.

To single out chapters of especial merit and interest is difficult, but the following are particularly good: Injuries and Diseases of the Skin and Substancous Tissues—including Infections of the Hand; Injuries and Diseases of the Veins. Injuries and Diseases of the Lymphatic System; and Treatment of Post-operative Conditions.

Here and there one feels that completeness of detail in operative precedures has been sacrificed to brevity and condensation, for example, in the description of the operation of suprapubic prostatectomy, and in the description of thyroid lobectomy.

The attempt to separate the clinical phenomena of appendicitis into a number of symptomatic groups is possibly overdone and is fraught with some danger if we are taught that some forms of the disease do not require operation. After an experience of many years we believe that a better rule is to advise operation in all cases as soon as a diagnosis can be made; and in making the diagnosis the two most important symptoms are localized tenderness and muscular resistance or rigidity. The rigidity may be very slight as compared with the normal resistance on the other side, but a difference can be recognized. True it is, too, that in a few cases of appendicitis the diagnosis is not always easy and the uncompromising advocate of early operation may be led into occasional errors. We have removed the appendix in the beginning of enteric fever and have seen the same done in the beginning of a right lobar pneumonia, but how many, many times have we seen cases nursed along with "slight attacks" and with "catarrhal appendicitis" until an abscess or general peritonitis has made the surgeon's work dangerous or in vain.

But these are minor criticisms of a minor critic—the book as a whole deserves our commendation, and authors and publishers alike are to be congratulated upon the production of a work so complete and so thoroughly up to date.

W. A. B.

LEGAL PRINCIPLES OF PUBLIC HEALTH ADMINISTRA-TION. By H. B. Hemenway, A. M., M. D. Buckram. pp. 794. T. H. Flood & Co., Chicago.

It is charged that we are purdened with over-legislation. Not the smallest contribution to this plethora of laws come from over-zealous enthusiasts both within as well as outside of the profession. Frequently these laws are drawn by non-medical men with too little knowledge of the scientific principles involved or by medical men with no knowledge of law, with the consequence that monstrosities in legislation are foisted upon the public, which then in self-defense will ofttimes destroy the good with the bad. Such faulty legislation leaves prejudices which obstruct and hinder worthy and legitimate efforts at progress and betterment.

Every student of our health laws will agree that they are sadly lacking in uniformity and not infrequently in soundness and that a revision correcting these defects would be highly desirable. No new legislation should be attempted without careful consideration of soundness of subject matter and legal status.

In his Legal Principles of Public Health Administration, the author undertakes to instruct the health officer as well as the lawyer in what both should know for better health administration and legislation.

The author, who has had the advantage of having been in active public health work, is also evidently a close student of the intricacies of law, and in our opinion has succeeded surprisingly well in dealing with his dual and exceedingly difficult problem. The book is unique and we know of no other book in American literature exactly like it.

Covering every point in law by citing specific court decisions, the book is impressive in the stupendous amount of work it represents. Some of the elementary matters in the earlier chapters might, however, we believe, safely have been omitted. Altogether the book seems to us immensely valuable to health officer and lawyer alike, not only for the wealth of positive information which it contains, but also for the interesting suggestions it offers.

#### INFANT HEALTH.

A Manual for District Visitors, Nurses and Mothers. By J. S. C. MaeMillan, Oxford Medical Publications. Cloth, \$.75.

This little book, which a visitor could put in her hand bag, gives in clear and concise form many facts which should be of great value to the people for whom the book is prepared.

The Authoress evidently knows thoroughly the practical side of the work, and has done a real service in presenting so interestingly her ideas.

A Text Book of Chemistry and Chemical Urinaltsis for Nurses. By Harold L. Amoss, S. B., S. M., M. D., Dr. P. H., formerly Chemist, Hygienic Laboratory, U. S. Public Health Service; Physiological Chemist, U. S. Bureau of Chemistry; Instructor in Physiological Chemistry, George Washington University Medical School; Assistant in Preventive Medicine, Harvard Medical School. 12mo, 268 pages. Cloth, \$1.50, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

This short treatise on chemistry for nurses by Dr. Amoss is deserving of merit; the book is well written; the arrangement of material is good; and the summary at the end of each chapter is invaluable to beginners for getting a brief and concise conception of the subject matter.

H. T. K.

A NURSING MANUAL FOR NURSES AND NURSING ORDER-LIES. By Duncan C. L. Fitzwilliams, M. D., Ch. M., F. R. C. S. Surgeon in charge of out-patients and lecturer in clinical surgery, St. Mary's Hospital; Senior Assistant Surgeon, Paddington Green Children's Hospital; Capt. 1st City of London Field Ambulance, etc., London. Small 8vo. \$2.00. Oxford University Press.

This book deals more with the Anatomy and description of diseases than with nursing and belongs only to the reference library. It contains little that is new except some of the nursing proceedures, the methods of which would seem foreign to the American trained nurse. It contains a number of very good illustrations, especially those demonstrating bandaging and application of splints. The last chapter deals with miscellaneous first aid and describes and illustrates methods used in the Red Cross army service.

# The Wisconsin Medical Journal

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TRANSCRIPT OF PROCEEDINGS OF THE HOUSE OF DELEGATES OF THE STATE MEDICAL SOCIETY OF WISCONSIN,

Oct. 5, 6, 7 and 8, 1915.

Evening Session, Tuesday, Oct. 5, 1915, 8 o'clock P. M., in the Gold Room, Hotel Wisconsin.

Meeting called to order by the President, Theodore J. Redelings, Marinette.

PRESIDENT: Gentlemen, I hope that this may initiate one of the most successful meetings that this Society has ever had, if not one to surpass all previous meetings.

The first order of business is the roll call of delegates by the Secretary.

Roll call by the Secretary.

PRESIDENT: There being a quorum present, the meeting will proceed.

The next order of business is the report of the Committee on Public Policy and Legislation, Dr. J. P. McMahon, Chairman.

The report of the Committee on Public Policy and Legislation was presented by Dr. J. P. McMahon, Chairman, Milwaukee, as follows:

Dr. J. P. McMahon, Milwaukee: Mr. President and Members of the House of Delegates: Inasmuch as the greater part of the report was printed in the handbook circulated to the House of Delegates, it will hardly be necessary to read the full draft at this time. The report was written rather hurriedly in order to get it into the hands of the Secretary before September 1st, as a result of which the preparation of an itemized account of the expenses and the discussion of the question of the establishing of a state hospital and farm for inebriates were omitted. A few days ago the subject of the management of the State Tuberculosis Sanatorium at Wales was brought to the official attention of the committee. I take it that the reading of the additions to the circulated report is all that will be necessary at this time.

To the House of Delegates of The State Medical Society of Wisconsin:

The principal questions which engaged the attention of your committee during the last year were necessarily those which were proper subjects for consideration by the legislature.

Pursuant to the authority given the council during the last meeting, the committee was increased from three to eight members. Considerable thought was given to the selection of the additional members, after which it was decided to choose five from the membership of the Medical Society of Milwaukee County and three from the membership of the Dane County Medical Society, thereby making it possible for the members, or the majority of them, to have as frequent sessions as may be necessary.

In order to keep in closer touch with the work of the legislature and the progress of bills in which we were especially interested, and more especially to attempt to prevent the passage of such anomalous bills as the marriage and venereal disease act (Eugenic Law) of the 1913 session, we arranged to have the full transactions of both houses forwarded weekly. The bills and their progress were checked over as reports reached us. The amount of labor required to do this checking can be realized when you become aware of the facts that there were approximately nine hundred bills presented to the Assembly and over seven hundred bills considered by the Senate and that about six hundred of the total were enacted into law. This plan of keeping track of the transactions does not meet all requirements, however, because a bil! may be very radically changed and even passed before the printed reports are distributed.

MEDICAL EDUCATION AND THE MEDICAL PRACTICE ACT.

In accordance with the instructions given during the last two sessions of the Society to advocate a bill designed to increase the preliminary educational requirement of those entering upon the study of medicine from a high school diploma to a two years' college coursethe equivalent of the two years' premedical course at the University of Wisconsin-your committee, early in Deeember, 1914, arranged with the State Board of Medical Examiners to have their attorncy, in co-operation with your committee, draft and promote the passage of such amendments to the medical practice act as were necessary to carry out these instructions. Inasmuch as the bill had a rather labyrinthial passage, a considerable number of inquiries have been made for information about it, a good deal of criticism has been directed against it and explanations requested as to why such a

bill was allowed to pass, and inasmuch as there has been some criticism of the committee's handling of the work assigned them in connection with this matter, a brief history of the preparation, the furthering, and the different steps through which the bill passed will be given. A bill was prepared and submitted for consideration before January 1st. This bill was returned with suggestions for improvement, which suggestions were incorporated into what constituted a more or less complete redraft of the medical practice act and the redraft was OK'd by the committee. The OK'd bill was introduced before the Senate. The essential features of the redrafted bill with respect to educational requirements were that it would require those desiring to enter upon the practice of medicine, surgery, osteopathy, or any other form or system of treating disease, after January, 1919, to present evidence of having completed a two years' college course-equivalent to the two years' premedical course at the University of Wisconsin-before entering upon the study of medicine, surgery and osteopathy, and it would require those desiring to engage in the practice of midwifery, at any date subsequent to its passage, to present evidence of having completed the equivalent of a four years' high school course and of having completed a twelve months' course in a recognized college or school of midwifery. These provisions, if enacted, would not only have advanced the preliminary educational qualifications of the members of the recognized schools of medicine, but likewise the preliminary educational qualifications of the representatives of the different irregular schools of practice, as a result of which they would be better qualified to make diagnoses, to recognize the limitations of their own theories and teachings, and become more conscientious in the advice given those who may place their physical and mental welfare under their care. It was hoped and believed that the recognition by them of their limitations, and the possession by them of a greater degree of conscientiousness would impel the majority to continue their education until they were able to meet the educational requirements of modern day regular schools of medicine. The bill provided for registration of those practicing massage and hydrotherapy. It made it unlawful for any person not licensed to practice medicine, surgery, or osteopathy to assume the title "Doctor," "Specialist" or attach any letters or designations to his name which may in any way represent him as being legally engaged in the practice of medicine, surgery, or osteopathy in any of their branches. It increased the fees payable by itinerant practitioners to \$250 per annum. And it increased the fccs payable by those securing a certificate of registration or a license to \$25. The bill on the whole would have afforded excellent protection to the unsuspecting laymen, but the usual number of representatives of the irregular schools were present in the interest of these schools and in their own personal and mercenary interests and opposed the bill by the well known means of pleading vested interests, making extravagant claims, raising the ery of interference with personal liberties, by the "you help me and I'll help you" system, etc., etc.,

under the guise of which the usual arts were successfully employed so to write the proposed law as to afford all possible advantage to these irregular schools instead of protecting those who, according to the theory of the law, are supposed to be protected. The bill was referred to the Committee on Education and Public Welfare of the Senate and a date set for a hearing. Members of your committee appeared at the hearing. To their great surprise and without consultation with any member of the committee, a radically amended or substitute bill had been drawn and a brief prepared and printed on it by the counsel for the State Board of Medical Examiners and offered on behalf of said board as a substitute for the bill which your committee OK'd. The substitute bill was entirely devoid of many of the desirable provisions of the OK'd bill. It required only a high school diploma of those undertaking the study of osteopathy. It contained provisions entitling future graduates from schools of osteopathy (recently styled schools of osteopathy and surgery) to take an examination in surgery, and if successful in answering the questions, to practice surgery. It provided for the transferring of the supervision of the registering of graduate nurses from the Board of Health to the State Board of Medical Examiners. Amendments to the amended bill, which at the time had not been printed, were offered by the Wisconsin State Osteopathic Association designed to recognize surgery as taught in osteopathic institutions; to term osteopaths "osteopathic physicians"; to give osteopaths a professional standing before courts; and to make it possible for osteopaths now practicing in Wisconsin to apply for an examination in surgery; and to enable those who succeed in passing the examination to practice surgery. The sponsor for the bill, when questioned as to whether he was accepting these amendments proposed by the osteopaths, made the significant reply that he was not opposing and would not oppose them. Your committee, being at a total loss to understand the necessity for or the circumstances attendant upon the drafting and introduction of the substitute bill, immediately called a meeting of the members of the State Board of Medical Examiners nominated by the State Medical Society and twenty-five other physicians who occupy official positions in different medical organizations. After mature deliberation, a member of your committee and a member of the State Board of Medical Examiners were instructed to arrange for a redrafting of the substitute amendment so as to include all of the desirable provisions of the OK'd bill and eliminate the undesirable provisions of the substitute bill. For incomprehensible and inexplainable reasons, those appointed could not accomplish the task assigned and another conference was called, during which some progress was made. Briefs prepared in support of the OK'd bill and in opposition to the undesirable features of the substitute bill, by the representatives of your committee, by representatives of the Wisconsin Surgical Society, by representatives of the Milwaukee Surgical Society and by representatives of the Medical Schools, were forwarded to the committee before which the bill was pending. From the date of these

briefs, the undesirable provisions of the bill became more numerous, compromise after compromise, and amendment after amendment were offered and were accepted without consultation with anyone save those proposing and those accepting the undesirable compromises, at least so far as your committee is aware, and the substitute bill was finally passed. The act requires two years' college work of those entering upon a course in medicine this fall. It requires but a high school diploma of those entering upon a course in osteopathy. Those graduating in osteopathy in the future may take an examination in surgery, and if successful in passing it they may practice surgery. Anyone licensed to practice osteopathy in this state at the present time may demand an examination in surgery regardless of the character of his preliminary education and professional training. And worst of all, the so-called chiropractors may practice in this state without presenting any evidence whatsoever of any form or degree of education provided they display in their office a sign "Not registered or licensed in Wisconsin." As you well know, chiropractors and a number of other irregular practitioners have for a number of years been practicing illegally, by suffrance as it were. And now it comes to pass in the Nineteen Hundred and Fiftheenth Year of our Lord that those whose official duties require that they exert every possible effort to require the representatives of all irregular sects properly to qualify for the responsibilities which they assume, take it upon themselves to clothe such unqualified, and up to this time illegal, practice with the stamp of approval of the great state of Wisconsin. A strict interpretation of the letter of the law would render it impossible for a nurse to practice unless she may have been a high school graduate and pass such an examination as would entitle her to become a registered nurse. The fee exacted from registered nurses is \$25, the same as the fee required from those securing a license to practice medicine. The clauses affecting the nurses were amended on the last day of the session. When the bill was passed, some of the members of your committee believed that an attempt should be made to secure its veto, but the majority who considered it concluded that its provisions are about 51 per cent, good and 49 per cent. bad-therefore no further protest was made and it became a law.

#### OPTOMETRY.

The question of the attitude your committee should take on legislation proposed by the optometrists was left to the judgment of the eye, ear, nose and throat practitioners who advised providing for their regulation by the State Board of Medical Examiners. Provision was made for their regulation in the substitute amendment, but the provisions were withdrawn before the substitute amendment was passed upon by the Senate lest it embarrass the other provisions of the proposed bill, and this again without consultation or authority from anyone. A law was enacted providing for a separate board for the registration of optometrists. Absolutely no preliminary educational requirements are provided, but those now prac-

tising will be required to submit to a practical examination in optics.

#### COMMITTMENT OF INSANE AND FEEBLE-MINDED.

From time to time during the history of the State Medical Society, the matter of the necessity for improving the laws providing for the committment of the insane and feeble-minded has been brought to the attention of the members. According to a strict interpretation of a decision handed down by Chief Justice Ryan more than forty years ago, patients suffering from Paranoia and Dementia, accompanied by undiscoverable delusions or hallucinations, and patients suffering from simple Melancholia, which is devoid of either, could not be committed for treatment or for their own care and protection or for the protection of society. As you all know, not only mild, but homicidal and suicidal forms of insanity exist without discoverable delusions. The majority of the judges throughout the state, fortunately, do not enforce this rule. Another feature requiring improvement is the long and somewhat involved questionnaire. It would also be desirable to amend the law so as to give hospital superintendents authority to exact periodic reports from paroled or discharged patients, thereby keeping the hospital in touch with the patient during the period of experimental release, facilitating their proper supervision and the rendering of frequently required material assistance, all of which would constitute the establishing of medical social service or after-care of the insane as exists in connection with similar institutions in other states and in England.

Recent experience in juvenile court practice and observations by social-workers engaged in the care of the feeble-minded demonstrate the desirability of giving the juvenile court judges more power and discretion in the commitment of the feeble-minded to state or county institutions or to a private institution for special care or protection to themselves or for protection to the community, and particularly protection of the female feebleminded from the possibilities of illegitimate pregnancies. A conference for the consideration of these subjects was called in December. Seventy-five invitations were issued to alienists, jurists, social-workers, educators and philanthropists. A list of those who attended appeared on page 323 of the January, 1915, issue of the JOURNAL. The discussions during the conference established the fact that amendments to existing acts covering these subjects were highly desirable. Your committee, accordingly, instructed an attorney to confer with jurists, the officers of the State Bar Association, the officers of the Milwaukee County Bar Association, alienists and social-workers, and prepare amendments providing for the desired improvement. After numerous conferences and considerable labor the amendments were prepared and introduced. A hearing was announced and the attorney to whom the preparing of the amendments was intrusted, accompanied by a number of social-workers, appeared in support of the bills. There also appeared judges, attorneys and representatives of commercial organizations who opposed the bills for different reasons,

as the result of which they were indefinitely postponed. Your committee is under obligations to Dr. W. F. Becker of Milwaukee, Dr. W. F. Lorenz of the Wisconsin Psychiatric Institution, Mendota, and several members of the Bar for counsel on these questions.

MARRIAGE AND VENEREAL DISEASE ACT (EUGENIC LAW).

Shortly after the legislature convened, a half dozen bills were introduced providing for either the repeal or amendment of the marriage and venereal disease act. Your committee believed that, inasmuch as a law had been enacted, an attempt should be made to amend it so that it would be workable, rather than to advocate its repeal, and thereby afford an opportunity for further observation of the attempt to protect and improve the race by legislative enactment. An amendatory bill was prepared providing for an examination to determine the presence or absence of active pulumonary tuberculosis as well as venereal diseases. The blank certificate proposed in the bill will give you a general outline of its provisions. It was as follows:

(Signature of Physician.)"

The legislature amended the 1913 act during the closing days of the session. The present act includes the essential provisions of the bill proposed by your committee, with the exception that an examination for active pulmonary tuberculosis is not required. The act provides that microscopical examinations for Gonoccocci shall be made without charge by the State Laboratory of Hygiene, Madison, and the Wassermann reaction when necessary shall be made without charge by the Psychiatric Institute at Mendota. The certificate prescribed in the new law is as follows:

(Signature of Physician)"

The fee allowed the examining physician is \$2.00.

DIAGNOSTIC LABORATORY AT THE PSYCHIATRIC INSTITUTE,
MENDOTA.

The legislature made provision for the making of the Wassermann test and chemical and microscopical examination of cerebrospinal fluid by the Psychiatric Institute at Mendota free of charge by the following act:

"The Board of Control is hereby authorized to make necessary arrangements with the laboratory of the Psychiatric Institute of Mendota for the giving of the Wassermann test to any person confined in any state or county institution, and to make such test for any practicing physician of this state who makes application therefor in behalf of any resident of this state, free of charge. Arrangement shall also be made with said institute for the making of chemical examination of the cerebrospinal fluid for any practicing physician of this state free of charge."

The preliminary rules and regulations formulated by the institute are briefly as follows:

Physicians shall apply to the institute for suitable containers (3 c. c. capacity) in which to forward blood and cerebrospinal fluid and for a statistical data sheet;

Specimens should be forwarded so as to reach the institute on either Monday, Tuesday, Wednesday, Thursday or Friday;

All information and statistics pertaining to each specimen will be filed under the names of the physicians who submit them;

And the reports on the examination will be made directly to the physician.

The cerebrospinal fluid examinations will include the Wassermann test, a chemical examination for globulin excess, Lange's colloidal gold chlorid test (Gold. Sol.), and a cell count when this is practicable. The prime purpose in establishing this laboratory was to prevent paresis, locomotor ataxia and other late syphilitie manifestations, it having become established that the free and repeated use of the Wassermann test and the study of cerebrospinal fluid is necessary to a positive diagnosis in many suspected eases of syphillis and that they are absolutely essential to the proper control of treatment, both of which should prevent the great majority of cerebrospinal syphiles. It requires but little reflection to perceive the great benefits that would accrue to patients, were advanced methods of diagnosis and treatment employed in the management of each recent luetic infection; and it requires less imagination to calculate an almost unlimited saving to the state as a result of such management. It is hoped that the profession will make free use of these laboratory facilities. Detailed outlines of the rules covering this work will undoubtedly be published by the State Laboratory of Hygiene and the Psychiatric Institute within a short time.

#### AMENDMENTS TO ANTI-FEE-SPLITTING LAW.

The anti-fee-splitting law was amended so as to cover nearly every possible subterfuge under which fee-splitting could be practiced and specifically to require that any physician, surgeon, nurse, anaesthetist, medical or surgical assistant render an individual separate statement of the charges made for any services, directly to the patient to whom the services were rendered. Violation of the act is made to constitute a criminal fraud, punishable by a fine of not more than one hundred dollars or by imprisonment in a county jail not exceeding six months and a revocation of his or her license to practice.

#### NEW HEALTH AND SANITATION MEASURE.

A couple of bills were introduced proposing to amalgamate the Board of Health with other boards, but they were finally defeated. A number of minor measures affecting health and sanitation and the work of the State Board of Health were passed. Some of these acts will assist the work of the Board of Health while others will embarrass it. Inasmuch as the State Board of Health disseminates information with reference to new laws in its official bulletin, further attention will not be given them here.

#### PROPOSED HOSPITAL FOR INEBRIATES,

As a result of a symposium on habit-forming drugs presented before the Medical Society of Milwaukee County early in the year and as a result of an investigation of the subject prosecuted by the Committee on Health of the City Club of Milwaukee, the Committee on Public Policy and Legislation was instructed to confer with Winfred C. Zabel, District Attorney of Milwaukee County, and to prepare and further a bill providing for the establishing of a state hospital for inebriates under the management of the State Board of Control. A comprehensive bill, which defined inebriety, provided for the appointment of a medical superintendent; provided for the examination of alleged inebriates by county courts; provided for paroles; provided for penalties to be visited upon those who may furnish to patients confined in the hospital intoxicating liquors or drugs; provided for the transfer of patients to any county hospital for the insane; provided for an appropriation of \$125,-000 for the purchase of land and the erection and equipment of necessary buildings; and provided for a tax of 2 per cent, on all license moneys for the sale of intoxicating liquors as a fund for the maintenance of the hospital. The bill was introduced, referred to a committee, and a date for a hearing set. Mr. Zabel, members of your committee and members of the Committee on Public Health of the City Club of Milwaukee, and others appeared in support of the measure. The bill, however, made no progress. In the words of one of the gentlemen who appeared in support of it, "It was promptly chloroformed in committee."

#### MISCELLANEOUS.

Additional matters were taken up by the committee, some of which did not seem to merit any particular action, while others brought forth divergent views, and, by agreement, no action was taken on these questions on

behalf of the committee. Bills involving the question of medical education and the broader questions and principles of education in general, in which the members of the committee were considerably interested, came under this agreement and the members appeared at hearings and voiced opposite beliefs and sentiments as physicians and as citizens.

#### THE STATE TUBERCULOSIS SANATORIUM AT WALES.

At a date subsequent to the writing of the report of the committee, which appeared in the hand-book for the House of Delegates, the matter of the present management of the sanitorium at Wales was officially brought to the attention of the committee. The reasoning on the question by the committee and the conclusions reached can be best outlined by reading a letter addressed to the Chairman of the Committee on Prevention of Tuberculosis. The letter is as follows:

"Milwaukee, Wis., September 29, 1915.

Thos. H. Hay, M. D., Chairman,

Committee on Prevention of Tuberculosis,

State Medical Society of Wisconsin,

Stevens Point, Wis.

DEAR DOCTOR:-

At divers and sundry times during the last number of months, complaints and criticisms directed at the Superintendent of the State Tuberculosis Sanitorium, at Wales, and the general policy governing the management of the institution have come to the attention of the members of the Committee on Public Policy and Legislation. More recently, the situation at the sanatorium and the general attitude of patients, employees, physicians and anti-tuberculosis workers throughout the state toward the institution were brought to the official attention of the committee with the advice that, whether or not the general adverse attitude be founded upon facts, it is seriously interfering with the 'service which the institution should render the tuberculous, and it is affecting anti-tuberculosis work generally. As many of the members of the Committee on Public Policy and Legislation as could be gotten together on the 27th instant considered the question and concluded:

That an effort should be made on the part of The State Medical Society to clear up the situation.

That, if complaints are based upon facts, corrective measures should be advocated;

That, if on the other hand they be not based upon facts, steps should be taken to disabuse the minds of physicians, anti-tuberculosis workers and prospective patients of the misapprehensions under which they are laboring, and at the same time vindicate the superintendent and his management, and restore confidence generally to the end that the institution may continue to serve, in the greatest possible degree, the purpose for which it was established.

The members of the committee assembled concluded further that the matter is a question for the Committee on Prevention of Tuberculosis, the other members of which are: C. A. Harper, C. H. Bunting, G. E. Seaman and J. M. Beffel, rather than one for the Committee on Public Policy and Legislation. The matter is accordingly respectfully referred to the Committee on Prevention of Tuberculosis.

Very truly yours,

J. P. McMahon,

JPM/LG

Chairman."

#### EXPENSES.

The expenses incurred during the last year were somewhat in excess of the totals for the last number of years in which the legislature was in session. They aggregate \$435.81. A complete itemized statement follows:

Statement of Expenses incurred by the Committee on Public Policy and Legislation during the year from Oct. 1, 1914, to Oct. 1, 1915.

Dec. 10, 1914, to Aug. 20, 1915—0. P.
McMahon, telephone\$ 45.10
1915—
Jan. 20-J. P. McMalion, Secretary of
State for copies of proceedings
of the Senate and Assembly
during the legislative session. 12.00
Fob 16 I D McMahan avnouses insi

	and the registrative session.
Feb.	16-J. P. McMahon, expenses inci-
	dent to attending the Confer-
	ence on Medical Legislation
	and Medical Education at
	Chicago

Dog 10 1014 to the Oc 1015 T D

Chicago	6.9
Mar. 00-J. P. McMahon, car fare and	
evnenses to Madison	5.00

	exp	oen:	ses to	Madi	son.			5.
Mar.	28—J.	Ρ.	McM	alıon,	ear	fare	and	

	expenses to Madison	5.28
May	4-J. P. McMalion, car fare to	
	Madison	2.14

	Madison	2.14
May	5-J. P. McMahon, car fare from	
	Madison and taxicab	2.64

	madison and taxican	
May	13-J. P. McMahon, Alice Hayes,	
	et al, services keeping track	
	of bills, committee hearings,	
	other clerical work, stenog-	
	raphy and typewriting during	
	the entire session of the legis-	
	lature	5

lature	50.00
July 28-J. P. McMahon, Multigraphing	
Service Co., letters forwarded	
to members of the Senate and	
Assembly on the Poole Bill	2.35

Aug.	25-J. P. McMahon, expenses in-
	cident to Father Moulinier's
	trip to Madison in re bills
	affecting medical education
	in Wisconsin

Aug.	26—L.	F. J	ern	nain,	car	fare	and	
	ex	penses	to	Madi	son,	two	trips	9.00

5.00

.00

Sept.	1	J. J.	McGo	vern, car	iare	and	
		expen	ses to	Madison.			7.18
CI I		* *	973			-	

Sept.	1—P.	F. :	Roge	ers,	car	fare	and	
	ext	enses	s to	Mad	lison			7.

Sept. 3-R. G. Sayle, ear fare and ex-
penses to Madison 5.28
Sept. 10-J. Van der Erve, car fare and
expenses to Madison 11.03
Sept. 17—Raymond T. Zillmer, 934 First
National Bank Bldg., ten days'
service during the period from
January 23rd to April 29th,
1915, in connection with the
investigation of the subject of
commitment of the feeble-
minded and insane, the draft-
ing of bills on these subjects,
and appearing before the leg-
islative committee at the hear-
ing on these bills 255.28
Sept. 27—A. T. Sullivan, long distance
telephone toll and postage,
February 23rd to September
27th, 1915 4.35

# SUMMARY.

In conclusion it will be seen:

That the legislature met as per constitutional provision.

\$435.81

That the usual number of bills, in keeping with advanced medical knowledge and progress, were proposed.

That progressive bills made little headway, in a slight measure, because legislators failed to discern the advantages which would accrue to the public as a result of their passage, and, in a large measure, because the representatives of the irregular schools of practice were present, as usual, for the purpose of securing personal or professional advantage under the guise of protecting the laity and without making any serious pretense to require the disciples of the irregular schools properly to prepare themselves for the work which they undertake.

That the principal reason why greater progress with desirable bills was not made during the session just closed was the failure of lay and medical men, occupying official and semi-official positions, to appreciate what constitutes modern day ideals with reference to these measures; or if they do appreciate them, they either failed to live up to their responsibilities in the premises or allowed petty ambitions or mercenary interests to control their actions, with the result of setting back medical education and the practice of medicine and surgery in Wisconsin at least fifteen years so far as legislative enactment can set them back.

The Society, this committee and some official boards need more men like a couple of score whose names might be mentioned who possess knowledge, ideas, ideals, the courage of their convictions and sufficient altruism to go out and fight for medical principles, even at the expense of personal comfort and professional carnings.

The chairman desires to improve this opportunity to thank the members with whom it has been his privilege to serve on this committee during the last six years; and to suggest to the House of Delegates that the duration of service should entitle one to retire even though the incumbency has been characterized by feeble efforts and lack of accomplishment. Compliance with this suggestion will be in the interests of the committee and of the Society.

Respectfully submitted,

J. P. McMahon Chairman, G. H. Fellman, J. J. McGovern, Philip F. Rogers, Samuel G. Higgins, Arthur G. Sullivan, A. S. Loevenhart, Charles S. Sheldon.

President: Gentlemen, the report of this Committee is before you; what is your pleasure?

DR. WILSON CUNNINGHAM, Platteville: I move that the report of the Committee on Public Policy and Legislation be laid on the table for the time being.

Dr. McMahon: Mr. President, as a delegate, I would like to second that motion.

PRESIDENT: The motion is that the report of the Committee on Public Policy and Legislation be laid on the table.

Dr. Cunningham: I should like to amend that, to make it the order of business at the next meeting.

PRESIDENT: Are you willing to include the amendment in your second, Dr. McMahon?

Dr. McMahon: Perfectly. My only reason for not discussing it now is that I believe Dr. Beffel and the other members of the committee should be present, otherwise it will be my pleasure to have the matter disposed of in a way in which the majority desire.

PRESIDENT: You include the amendment in your second?

Dr. McMahon: Yes, I will include the amendment.

Dr. Banning: Will it be taken up at another meeting?

PRESIDENT: Yes, the time is not specified. Dr. Cunningham, did you not specify the time?

Dr. Cunningham: The next meeting.

Dr. McMahon: If I may make the suggestion, three of the members of the Committee live in Madison, and we have no way of knowing now that they will be here during the next meeting. May it not be postponed until such time as we are sure

they can be present? They may not be here at 9 o'clock tomorrow morning.

PRESIDENT: That would be a matter of courtesy, and we will take it up at a subsequent session.

Motion put and carried.

PRESIDENT: The motion prevails, and this matter will be taken up at a subsequent session.

Dr. G. E. Seaman, Milwaukee: I am not a delegate, but if I may be permitted, I should like to ask the Chairman of the Committee if, in the discussion of the matter at the next session, we could not be given information as to what commercial bodies were interested in the matter of the commitment of the insane, and how they came to be represented as opposing this bill, and who their representative was, and whether he actually did represent them.

DR. McMahon: Mr. President, I was not present at the hearing. I was advised that representatives of the Merchants and Manufacturers Association and their attorney—at least a man who has been their attorney and a man, who, I believe, represented himself as representing them at the hearing—appeared in opposition to the bills. This reply, however, is born of information which came to me second handed.

Mr. Zillmer, who represented our committee, surely knows.

PRESIDENT: The next order of business will be the report of the Committee on Mcdical Defense, Dr. G. E. Seaman, of Milwaukee, Chairman.

The report of the Committee on Medical Defense was read by Dr. A. J. Patek, Milwaukee.

DR. G. E. SEAMAN, Milwaukee: It should be added that on the statement from the attorneys there are comments upon the nature of the cases, what was done; a pretty full comment on all of the important cases. It is the policy of the Society not to publish any of this matter, but it will be available for future reference, and, no doubt, would be of value for members of the Society who desire to use it.

As Dr. Patek has stated, there is a balance of some \$300 or \$350 to the credit of this account, and this work is expensize. I think it is well for the members to know that such companies as the Fidelity & Casualty Co. charge \$25 a year for defense, and I am informed that they have determined to raise their fee from \$25 to \$37.50.

The time may come when it will be necessary for us to raise this fee, even though we raised it only a year ago. But we had the matter up with our attorneys, and they have been exceedingly generous, I think, in making their fee reasonable, and they do not think that at this time we should take up the question of any increase. But we have 30 odd cases pending, and some few of them will be hard fought cases, no doubt, and may be expensive.

I believe that a careful analysis of the work of our attorneys, and the work of this defense will justify the expenditure, and would even justify a larger fee for such services as are rendered.

PRESIDENT: What is your further pleasure, Gentlemen, with reference to this report?

Dr. H. Reineking: I move that it be accepted and placed on file.

Motion seconded.

Motion put and carried.

PRESIDENT: The motion prevails. The next order of business is the report of the Committee on Publication, Dr. A. J. Patek, Chairman.

The report of the Committee on Publication was presented by Dr. A. J. Patek, Milwaukee, as follows:

# REPORT OF PUBLICATION COMMITTEE.

Members of the House of Delegates, State Medical Society of Wisconisn. Gentlemen:—

Were I to eite at length the work accomplished by our Journal, I could hardly do more than speak of the things that are known to all who read our publication. Our efforts to place before you a periodical that embodies Wisconsin medical thought, have been successfully earried out; and that these Wisconsin ideas are not without merit we who feel a degree of responsibility for placing them before you, can affirm without a sense of immodesty.

Appended to this report is our financial statement for the fiscal year. Again would I call attention to difficulties that are presented in the effort to feed the advertising pages with material that is above reproach, while constantly bearing in mind the necessity of keeping the cost of our publication within a reasonable limit. We have accomplished this, although only by neverceasing activity on the part of our managing editor, Dr. McMahon, to whom we tender our thanks for his successful results in the face of at times very disheartening discouragement. A little more help given this department by the readers of the Journal, in the way of patronizing what they may see of merit in the advertising columns, would indicate to the advertisers that their wares are not unnoticed, would be a well deserved encouragement—both to Dr. McMahon, and to the advertiser, and would prove a boost for the Journal.

I wish personally to disclaim any credit for the high plane of excellence that has been reached by our editorial department. Credit for this belongs to Dr. A. W. Myers, who has rounded out his five years of service in a manner that calls for high praise. The more is it to be regretted that Dr. Myers has felt compelled to sever his editorial relations with our Journal. The increasing demands of his professional work, make this course necessary. Having served in the same official capacity for a period of eight years prior to Dr. Myers' assumption of the editorship, I can speak appreciatingly of the sacrifice of time, and the slavery of self, the work demands. The publication committee owes and tenders its gratitude to the retiring editor.

We are pleased to announce that, as successor to Dr. Myers, we have chosen a man to whom work of this character is not unfamiliar. Dr. L. M. Warfield, our new editor, has had an abundance of experience, having been connected with a St. Louis journal before coming to Wisconsin. We ask for him the same consideration that has been given his predecessors, and are certain that his conduct of the Journal will testify to the excellence of our choice.

ARTHUR J. PATEK,
Chairman, Publication Committee.

FINANCIAL STATEMENT.

#### THE WISCONSIN MEDICAL JOURNAL.

PUBLISHING COST STATEMENT.

October 1, 1914, to October 1, 1915.

Income from publishing-

Advertising, gross charges	\$3,582.05
Less discounts and rebates	148.58
Net income from advertising	\$3,433.47
Subscription	29.35

Total income from operation....

\$3,462.82

Publishing expenses—

Printing\$	32,442.03
Salaries	1,302.00
Commissions for securing advertis-	
ing contracts	883.76
Postage	226.75
Cuts, drawings, etc	6.00
Office supplies and expenses	27.10
Miscellaneous general expenses	62.75

Total publishing expenses.....

4.950.39

Net cost of publishing the Journal... \$1,487.57 To members of the State Medical Society..... 21,442

The deficit of \$1,487.57 represents the cost to The State Medical Society of circulating 21,442 copies of the Journal, or about 6% a copy.

#### THE WISCONSIN MEDICAL JOURNAL.

#### FINANCIAL STATEMENT.

October	1.	1914.	to	October	1.	1915.

Cash balance October 1, 1914\$ 209.40
Receipts.
State Medical Society\$1,725.00
Advertising 2,919.86
Subscription
Halftones, zinc etchings and drawings 22.20 \$4.696.66
\$4,906.06
Disbursements.
Equipment\$
Printing 2,352.75
Salaries 1,182.00
Commissions for securing advertising
contracts 784.23

and collection inserts for Secretary. 25.00 Halftones, zinc etchings and drawings 28.20

Balance on hand October 1, 1915.

Postage .....

Office supplies and expenses.....

Miscellaneous general expenses.....

Reprints for Legislative Committee

\$ 219.03

4,687.03

225,00

27.10

62.75

#### Assets.

Office equipment\$ 158.63	
Cash in bank	
Accounts receivable 2,226.30	
Merchandise	\$2,623.08

#### Liability.

Accounts payable\$	611.90	
Credit balance on advertising accounts	41.48 \$	653.38

Assets exceed liabilities...... \$1.969.70

PRESIDENT: Gentlemen, what is your pleasure with reference to the report of the Committee on Publication?

DR. M. R. WILKINSON, Oconomowoe: Before leaving this question, I move that a vote of thanks be extended to Dr. Myers, retiring editor of the Journal, for his past labors and successful editing of the journal.

Motion seconded.

Motion put and unanimously carried.

PRESIDENT: The motion prevails, and the secretary will notify Dr. Myers of this vote of thanks. What is your pleasure with reference to the report of the Committee on Publication?

On motion duly seconded and carried, the report was received and placed on file.

PRESIDENT: The next order of business is the election of the Committee of 12 on Nominations, one from each district. Let us see how quickly we can get at this. I think in former years the nominations have been made seriatum for the several districts, and the committee elected in one motion. I suggest that we do that this evening, to expedite the matter.

The following were placed in nomination:

1st District, Dr. G. J. Hoffman, Hartford.

2nd District, Dr. Edward Kinnie, Elkhorn.

3rd District, Dr. J. F. Pember, Janesville.

4th District, Dr. Wilson Cunningham, Platteville.

5th District, Dr. G. W. Crosby, Sheboygan.

6th District, Dr. Burton Clark, Oshkosh.

7th District, Dr. W. E. Bannen, La Crosse.

8th District, Dr. E. E. Axtell, Marinette.

9th District, Dr. V. A. Mason, Marshfield.

10th District, Dr. M. Oyen, Ellsworth.

11th District, Dr. C. J. Smiles, Ashland.

12th District, Dr. D. J. Hayes, Milwaukee.

PRESIDENT: I think a motion would be in order to put these names before the House.

Dr. L. M. Warfield, Milwaukee: I move that the secretary be instructed to cast the ballot of the House of Delegates for the persons nominated as the Nominating Committee of this Society.

Motion seconded.

Motion put and carried.

PRESIDENT: The motion prevails, and the Committee is elected.

PRESIDENT: The next order of business is the report of the Committee on Revision of Constitution and By-Laws.

The report of the Special Committee on Revision of Constitution and By-Laws was presented by Secretary Rock Slevster, as follows:

SECRETARY: There have been several efforts to revise the constitution and by-laws. They have not been brought up to date since 1903, at the time of the reorganization, and your committee has gone carefully over all the minutes of the Houses of Delegates from that time up to and including 1914. I have listed in the report which you all have, the different substitutes which have been adopted by the House of Delegates at its various meetings. It will not be necessary to read these. We will start in on page 27, in the middle of the page.

Committee is before you. What is your pleasure?

Dr. H. Reineking, Milwaukce: What is the legal procedure?

Secretary: The constitution requires that it be read and acted on at a later meeting. This would constitute a reading of them.

Dr. Reineking: Next year, or this same session?

Session: This same session.

DR. REINEKING: I move that it take the usual course necessary in cases of amendments.

Secretary: The proper way would be to bring these proposed amendments up one at a time at a future meeting, discuss and act upon them then.

President: I am very certain that you cannot adopt them en masse, because they are reported upon conditionally. There are some of these amendments that are reported unconditionally. and at a certain point the recommendations are conditional recommendations, and are subject to the will of the House of Delegates rather than the committee appointed to do this work and make this revision.

DR. H. REINECKING, Milwaukee: While this question of revision of the constitution is up. 1 would like to call attention to one clause in Article 9, Section 3, which reads:

"No person shall be elected to any office who is not in attendance upon that annual session, and who has not been a member of the Society for the past two years."

Of course a person not a member of the Society, or who has just joined, cannot be elected; but it seems to me that this one clause "who is not in attendance upon that annual session", is rather a narrow restriction, and I desire to call attention to it at the present time so the members may think it over and see whether they want to keep it on the statute books. It occurs to me that it might happen that the Society would want to honor a man who could not be present at an annual session, and whom the Society had a special reason for wishing to honor by electing him to some office, and I do not think any such clause should stand in the way. I think the Society has discretion enough to elect its members, whether present or

DR. L. M. WARFIELD, Milwaukee: I move that

PRESIDENT: Gentleman, the report of this this report be laid on the table for further action by the House of Delegates.

Motion seconded.

Motion put and carried.

PRESIDENT: The next order of business is the report of the Committee on Prevention of Tuberculosis. I wish to say in behalf of this Committee. that Dr. Hay requested further time for this committee's report, because of matters which have just come up and which require another meeting of the Committee. There are certain matters that were brought out in the report of the Committee on Public Policy and Legislation, and which have to deal with conditions as they now exist at Wales, and I think, without further delay, we shall grant the Committee that privilege.

#### REPORT OF COMMITTEE.

#### PREVENTION OF TUBERCULOSIS.

Your committe begs to make the following brief report on the Tuberculosis problem as it exists in the State at this time:

A law was enacted authorizing two or more counties to join in the establishing of a Tuberculosis Sanatorium carrying out an enlargement, so to speak, of the old original law authorizing Counties to construct and maintain tuberculosis Sanatoria, and at the same time increase the State aid from \$3.00 per week per capita to \$5.00 per week per capita. Arrangements have been made whereby Counties not having Sanatoria may send patients to other Counties which maintain Sanatoria and which may have beds unoccupied.

II. The State Camp at Tomahawk for Convalescents has been completed and there are at present twenty or more patients taking advantage of privileges afforded thereby.

The good work of the Wisconsin Anti-Tuberculosis Association has been accomplished in the establishments of County Sanatoria and in the dissemmination of useful knowledge among the general public.

Milwaukee County has just completed the construction of the new Sanatorium, Muirdale, with present accommodations for 250 patients, with a plan providing an ultimate capacity of 500 patients this will be open for the reception of patients in about a month.

The Legislature of 1915 has continued reasonable appropriation for the State Sanatorium at Wales, which goes to show that the anti-tuberculosis investment is progressing favorably in the State with the statistical result that the death rate from tuberculosis has been reduced by one death in every sixty-eight hours.

At the eleventh hour the Committee on Public Policy and Legislation referred to this Committee alleged charges against the Medical management of the State Sanatorium at Wales. Our information is that the matter contained in these alleged charges has for the most part been furnished to the State Board of Control; in

our judgment any charges against the Medical Management of any State institution should be filed with the State Board of Control and do not fall within the province of this Committee for initial investigation and action.

All of which is respectfully submitted by the

Committee for the Prevention of
Tuberculosis.

The next order of business is the report of the Committee on Medical Education, Dr. L. F. Jermain, Chairman. Dr. Jermain is not present, and if there is no other member of the Committee present we will omit that report for the present, and pass to the report of the Committee on Necrology. Dr. A. W. Myers, Chairman.

## REPORT OF THE COMMITTEE ON MEDICAL EDU-CATION.

To the House of Delegates State Medical Society:

Concerning medical education in the State of Wisconsin your committee has little to report beyond what appeared in the Educational number of the Journal of the American Medical Association of August 21st, 1915.

This admirable report is indicative of the good work done by the council on Medical Education since its organization in 1905. According to this report the number of Medical schools in the United States have been reduced from 162 in 1904, to 95 in 1915, and the entrance requirements have been raised so that at present only few colleges remain on the basis of a high school requirement. In the large majority of these remaining medical schools the equipment and opportunities for scientific and clinical teaching have been augmented and improved.

The total number of medical students in the United States in 1915 was 14.891, a decrease of 1,611 from 1914, a decrease of 3,521 from 1912, and a decrease of 13.251 or 47.1% from 1904.

The total number of graduates for the year 1915 was 3,536; 58 below 1914 and 2,211 or 38.8% below 1904. The total number of medical students from Wisconsin was 387, 173 of which took their instruction in Wisconsin schools. In 1904 only 4 or 2.5% of all medical schools were requiring a preliminary education in advance of the usual high school education. At present 83 or 88.4% require one or more years of college work. Of these 83 colleges 39 are requiring two or more years while in seven others this requirement will go into effect in the next year or two. Of the 95 medical schools 67 are rated as Class A, 22 as Class B, and 15 as Class C.

Both medical schools in this state require two years of college work and both are rated as Class A. The total number of medical students in Wisconsin Colleges were 221, 96 in the State University at Madison, and 125 in Marquette in Milwaukec. It is gratifying to note that the council on Medical Education is laying special emphasis on the strictness and honesty with which the standards of admission and advanced standings are ad-

ministered, and that they are enabled by means of the "student register" to discover and expose lax methods and "paper standards" in medical schools.

Whether or not it is wise for the state or the medical schools to at this time adopt the 5th or hospital year is still a matter for discussion. Some of the best educators in this country are still loath to relinquish their control of any part of medical education to hospital staffs over which they have no control and who realize only to limited or imperfect degree their educational responsibilities.

Respectfully submitted,
L. F. JERMAIN,
J. VAN DE ERVE,
C. R. BARDEEN.

DR. McMahon: Dr. Myers was unable to come to the meeting and he asked me to bring the report. I believe that there have been a couple of names added to the list as it appeared in the handbook for the House of Delegates. There have been a few recent deaths.

Report presented by Dr. J. P. McMahon, Milwaukee, as follows:

## REPORT OF COMMITTEE ON NECROLOGY.

Dr. John Schwenderer, Milwaukee, died on August 31, 1914, aged 67 years. He was a graduate of the Northwestern University Medical School in 1878. Member of Milwaukee County and the State Medical Societies.

Dr. Martin Joyce, Waterloo, died at Chicago on September 6th, 1914, following an operation for appendicitis. Born Nov. 25, 1878. Educated at the Waterloo High School and Illinois College of Physicians and Surgeons, graduating from the latter in 1903. Practiced at Harvey, North Dakota for nine years, and at Waterloo two years. Member of Jefferson County and the State Medical Societies.

Dr. L. M. Trulson, Stoughton, died on September 5, 1914, of Bright's Disease. Born at Janesville, August 22, 1873. Attended Beloit College and graduated from Northwestern University Medical College, Chicago in 1898. Member of Dane County and the State Medical Societies.

Dr. E. B. McShane, Milwaukee, died on September 19, 1914, aged 44 years. Born November 3, 1870, at Muskego, Wisconsin. Graduated at the College of Physicians and Surgeons, Chicago, in 1895. Practiced for several years at Hales Corners and then located at Milwaukee. For a number of years had practiced at Alton, Kansas. Member of Milwaukee County and the State Medical Societies.

Dr. Solon Marks, Milwaukee, died on September 29. 1914, aged 87 years. Born at Stockbridge, Vermont, educated at Royalton Academy. Came to Wisconsin in 1848. Graduated at Rush Medical College in 1853. Practiced at Jefferson and Stevens Point. He served throughout the Civil War and returned to Milwaukee in

1865. He was a member of the Military Order of the Loyal Legion, American Medical and Surgical Associations, Milwaukee County and the State Medical Societies,

Dr. N. Z. Wagener, Sturgeon Bay, died suddenly on October 3, 1914, of pneumonia following an operation for appendicitis, aged 41 years. He was a graduate of the Northwestern University Medical School, Chicago, in 1904. Member of Door County and the State Medical Societies.

Dr. Sarah R. Munro, Milwaukec, died on November 4, 1914, aged 75 years. She was a graduate of the Women's Medical College of Pennsylvania in 1872. Practiced at Milwaukec for twenty-five years. Member of Milwaukee County and the State Medical Societies.

Dr. Frederick L. Foster, Fond du Lac, formerly of Sheboygan, died on December 12, 1914, aged 41 years. Death was due to pneumonia. He was born at Plymouth, Wisconsin, June 2, 1873. Resided at Sheboygan until 1883, when he removed to Fond du Lac. Graduate of Hahnemann Medical College in 1900. Member of Fond du Lac County and the State Medical Societies.

Dr. A. I. Comfort, for twenty-three years a surgeon in the National Soldiers' Home, a few years at Ft. Leavenworth and the balance at the Milwaukee branch, and for thirty years previous to that a surgeon with the regular army, with Civil War service, died at the home on February 1, 1915, aged 87 years. Death was due to hypostatic pneumonia, following a fracture of his right hip sustained in a fall. He was a graduate of the University of Pennsylvania, department of medicine in 1860. Member of Milwaukee County and the State Medical Societies.

Dr. Emil Sidler, Cudahy, died suddenly on February 4 of heart failure, aged fifty-two years. He had been health commissioner of Cudahy for eight years. Member of Milwaukee County and the State Medical Societies.

Dr. Harry Paul Chambers, located at Florence for sixteen years, died on February 10th aged 48 years. Graduate of the College of Physicians and Surgeons of Baltimore in 1891. Surgeon for the Florence Iron and the Reserve Mining Companies. Member of Florence County and the State Medical Societies.

Dr. F. W. A. Brown, Oshkosh, died suddenly of heart failure on February 20, 1915. Born at Elizabethtown, Ontario, Canada, July 4, 1862. Educated at Potsdam, N. Y., normal school, Queen's University, Kingston, Ontario, Colleges of Physicians, Ontario, and McGill University, Montreal, graduating from the latter institution in 1892. Practiced at Syracuse, N. Y.. West Stewartstown, N. H., and located at Oshkosh in 1893. In 1896 he was appointed assistant at the Northern Hospital at Winnebago, under the late Dr. W. A. Gordon, and remained there for several years, before again returning to private practice. Member of the Oshkosh Mcdical Club, Fox River Valley, Winnebago County and the State Medical Societies.

Dr. George E. Keenan, Madison, died on March 5, 1915, aged 54 years, after an eight weeks' illness of pneumonia. He was a native of Dane County, born in the Town of Dunn. Studied at the University of Wisconsin, a member of the class of 1882. Entered Rush Medical College and graduated in 1883. During the

second term of President Cleveland Dr. Keenan served as American counsul-general at Bremen. He practiced for a time at Stoughton, but was located at Madison for twenty-five years, with the exception of the four years spent in Europe. Member of Dane County and the State Medical Societies.

Dr. Edward C. Dollard, Neenah, died on April 1st, after an operation for appendicitis. He was born in the Town of Russell, Sheboygan County, forty-two years. ago. He attended Rush Medical College, and Jefferson College, Philadelphia, completing his course at the latter institution. He practiced for a number of years at Glenbeulah. Member of Winnebago County and the State Medical Societies.

Dr. Robert Cottington, Bloomer, died on April 17, 1915, aged 67 years. Born at Waterville, Oneida County, New York, February 22, 1848. Came to Wisconsin in 1851, and lived in Missouri for two years. He graduated from Rush Medical College in 1877, and came to Prairie Farm, practiced there until 1880, when he went to Bloomer. He practiced for a time at Rice Lake and Reedsburg. He was an honorary member of the Chippewa County Medical Society.

Dr. Ralph R. Chase, Eau Claire, died on May 4, 1915, of heart failure, aged 55 years. Born at Lima, Livingstone County, New York, in 1860. He came to Eau Claire in 1889, immediately after his graduation from the University of Minnesota Medical School. Member of Eau Claire County and the State Medical Societies.

Dr. Edward C. Fish, for thirty years located at Moslnee, died on May 13, 1915, after an illness of five weeks duration of tuberculosis meningitis. Born at Orangeville, Barry County, Michigan, August 16, 1858. He taught school for three years. Graduated at the University of Michigan, department of medicine, in 1883. In May, 1884, he located at Mosinee, and had resided there continuously with the exception of 1½ years spent at Hurley. Member of Marathon County and the State Medical Societies.

Dr. Erasmus Newton Sartell, located at Janesville for six years died at the Mendota Asylum on July 2, 1915, after a week's illness with pneumonia, aged 59 years. Graduated at Rush Medical College in 1893. He formerly practiced in northern Wiseonsin. Member of Rock County and the State Medical Societies.

Dr. Lewis Sherman, Milwaukee, died on July 3rd. 1915, after an illness of four months' duration, aged 71 years. Graduate of the New York University Medical College in 1870. Immediately after graduation be came to Milwaukee. Member of Milwaukee County and the State Medical Societies.

Dr. Gaylord E. Pitts, Mt. Horeb, was killed on July 28, while crossing the railroad tracks, by a passenger train of the Northwestern road. Dr. Pitts was 34 years old. He was a graduate of the Platteville Normal, and in 1910 graduated from the Northwestern Medical College. Member of Dane County and the State Medical Societics.

Dr. Alois Driessel, West Bend, died after a year's illness, on July 31, 1915, aged 33 years. Born at Hilbert, Wisconsin, Jan. 16, 1882. Resided for a time at Lomira. Attended the seminary at St. Francis, and sub-

sequently entered Milwaukee Medical College, graduating in 1906. First located at Boltonville, then at St. Cloud, and had practiced at West Bend for five years, where he was associated with Dr. G. A. Heidner. Member of Washington County and the State Medical Societies.

Dr. James Richmond, Loyal, died suddenly of heart failure on February 20, 1915, aged 57 years. Graduate of the University of Illinois, College of Medicine, 1887. Practiced at Loyal for twenty years. Member of Clark County and the State Medical Societies.

Dr. Frederick P. Leich, Jackson, died on August 21, 1915, aged 75 years. He was a member of Washington County and the State Medical Societies.

Dr. Henry F. Kortebein, Milwaukee, died on September 14, 1915, aged 47 years. He was born in Milwaukee in 1868. Graduated in 1892 from the Northwestern University Medical School. Member of Milwaukee County and the State Medical Societies.

Dr. F. C. Gillen, Milwaukee, was killed on September 3, 1915, when a compound containing potash exploded during experiments to find a process for manufacturing that chemical. Dr. Gillen was 44 years old. Born at Grand Haven, Michigan, graduated from the University of Michigan, Department of Medicine, in 1892. In 1893 he came to Milwaukee and resided there up to the time of his death. He was a member of Milwaukee County and the State Medical Societies.

Edmund F. Woods, M. D., F. A. C. S., Janesville, Wis., Med. Coll. Ind., 1882. Fellow of the American Medical Association; member of the Clinical Congress of Surgeons; member of the American Association of Railway Surgeons; District Surgeon for the Chicago & Northwestern Railway for twenty years; members Wisconsin State and Rock County Medical Societies. Drowned by the sinking of the S. S. Arabie, August 19th, aged sixty years.

Dr. Albert F. Fuehs died at Loyal, Wis., during the summer,

Signed,

A. W. Myers, Chairman.

DR. H. REINEKING, Milwaukee: I wish to make a remark concerning this report on Necrology. I miss the name of our old friend, Dr. Albert F. Fuchs, who died at Loyal, Wisconsin, some time during the summer. The Doctor was at one time a very active and useful member of this Society. His name was not mentioned in the report of this Committee, and it should be added.

Dr. McMahon: The committee report, in the main, is made up of obituary notices, taken from the daily papers throughout the State, and it is quite possible that a few names may have been overlooked.

DR. McMahon: I observe that some of the delegates are starting to leave, and there are a few remarks that I would like to address to the house

before any more go, lest a false impression be taken away with reference to the relationship existing between the chairman of the Committee on Public Policy and Legislation and the members of the State Board of Medical Examiners who were nominated by the State Medical Society. There was nothing in the report of the committee that was intended as criticism of the members of the State Board of Medical Examiners nominated from this Society, nor criticism of any of the members of the State Board of Medical Examiners for anything which they individually or collectively did. Anything which may be considered as criticism is rather an explanation of transactions which were permitted to take place, or acts which were permitted to be done on behalf of the Board-representations as it were—which we have every reason to believe would not be sanctioned by the great majority of the Board, if indeed they would be supported by any one member of the Board.

Now, most of you have had business of different kinds with your humble servant during the last six or eight years, and I am sure none of you have had any disagreements with him, or have considered him of a quarrelsome nature. The principal criticism which he would direct against himself is that he is, in the main, entirely too mildmannered; and lest the impression become established that personal differences actuated the wording of the report or entered into the report or discussion in any possible way, I desire to make the following statements: I was, and, in some measure, am still, a student of Dr. Beffel's. An important part of my early training in medicine was imparted by Dr. Beffel. Most of the ideals which I possessed at the time of my graduation in medicine were implanted by Dr. Beffel, than whom no one could have been more powerful in inculcating the higher ideals of medical teachings and practice, and particularly the duty of members of the medical profession to take an interest in social problems, than was Dr. Beffel when he came to Milwaukee, and when he taught Pathology at the Wisconsin College of Physicians and Surgeons. No physician in Milwaukee has rendered a more far-reaching service in preaching the gospel of preventive medicine to the masses during the last six years than has Dr. Beffel. In addition I am free to confess that I am under obligations to Dr. Beffel for professional courtesies and for official courtesies

during his service as secretary of the State Board of Medical Examiners.

I know of no man residing out in the state whom it has given me more pleasure to greet during the last six or eight years, and with whom I have enjoyed visiting more, than Dr. Dodd. When the different questions came up and when we became aware that these undesirable alterations were being made—to all intents and purposes—and, in fact, on behalf of the State Board of Medical Examiners, as stated in the report, we immediately called a meeting of the members of the Board of Medical Examiners nominated from this society. In response to a summons, Dr. Dodd attempted to reply over the telephone, but it was impossible to understand him, owing to interference with the telephone service incident to a recent severe windstorm. We made three or four attempts to discuss the matter over the telephone, and finally Dr. Dodd Promised to come down. He was unable at the eleventh hour to get away, which inability he explained by means of a telegram.

Dr. Abraham came to Milwaukee early one Sunday morning and spent from 9 o'clock until 3 o'clock going over the different provisions of the bill, which finally became the medical practice act. Dr. Abraham returned on Tuesday or Wednesday and spent three-quarters of a day in attempting to adjust the matter and restore the bill to its provisions at the time it was OK'd by your committee. It would take considerable time to apprise you of the valuable service rendered the cause of ideal legislation by Dr. Abraham during these two conferences.

So be it not understood that there are any personal differences, that there is any disposition on my part, or on the part of any member of the committee, to criticise any of the members of the Board of Medical Examiners for things which were done by them. The report is in the nature of an explanation, which, as stated before, we thought was due the members of this house and of this society, and in the nature of a vindication of the committee themselves. Many of the members have written and others have verbally requested explanation. The explanation, as also previously stated, is that the serious alterations were, in the main, done by one man on behalf of the Board of Medical Examiners, and, so far as your committee could determine, nobody on the Board of Medical Examiners was authorizing the changes, and, at the same time, nobody seemed to be able to prevent them.

PRESIDENT: We now come back to the report of the Committee on Necrology. What shall be done with that report? We are very thankful to the doctor for bringing the report up to the last hour, and also to Dr. Reineking for suggesting the name of Dr. Fuchs.

Dr. J. M. Dodd, Ashland: Mr. President, I move that the report be accepted, with the addition of the name suggested by Dr. Reineking.

Motion seconded.

Motion put and carried.

The next order of business is the report of the Committee on Publicity, Dr. Charles H. Stoddard, Chairman. I have not seen Dr. Stoddard this evening. If he is not present we will pass this order of business and go to the report of the Delegate to the National Conference on Medical Legislation and Medical Education, Dr. McMahon.

## REPORT OF THE COMMITTEE ON PUBLICITY.

To the House of Delegates, State Medical Society of Wisconsin.

#### GENTLEMEN: -

Your Committee on Publicity begs leave to submit the following report:

At the 1914 meeting it appeared that the Committee on Public Policy and Legislation felt the need of better information and support in their legislative efforts from the medical profession, and from the public in general, and after considerable discussion a Committee on Publicity was appointed. The Committee was given only general instructions, but its duties were assumed to be similar to those of the corresponding committee of the American Medical Association, viz.: the Committee on Public Health and Legislation.

Correspondence with the A. M. A. committee was accordingly begun, and the advice given us by their secretary, Dr. Frederick R. Green was practically the following:

- 1. That medical men appearing before legislative bodies, even though acting in the public interest are seldom credited with motives other than selfish.
- 2. Measures advocated by disinterested laymen receive far greater consideration than those which are apparently for the benefit of one class.
- 3. With these two postulates in view a publicity campaign should seek to build up a sentiment for scientific public health requirements by means of popular lectures, exhibits and judicious press campaigns, rather than by spasmodic efforts to obtain support for measures immediately before their consideration and vote in the legislature.

In adapting such a program to conditions which prevail in Wisconsin a survey of the publicity work already under way shows that as a result of several years of campaigning by various agencies much has been accomplished. The Wisconsin Anti-Tuberculosis Association has been conducting exhibitions and popular lectures, the State University has through its extension division sent out thousands of press notices on various health topics, and the State Board of Health through its inspectors has done considerable educational work, and bids fair to do much more.

While but little constructive work has been undertaken by your committee during the past year, arrangements have been made with Dr. H. E. Dearholt of the University Extension division to furnish a traveling exhibit, and possibly lecturers, who may be secured at small expense. The various county and even district societies are to be encouraged to plan for these exhibits to last from three to six days, and it is hoped that lecturers may be sent to assist local physicians and laymen who will undertake the work.

While much has been done in the manner indicated much remains to be done, and the idea will doubtless be taken up with enthusiasm. An effort will be made to plan an itinerary thereby economizing greatly the time of demonstrators and the expense of transportation.

Such a program as the one outlined will appear to differ from the ideas expressed in the meeting which created this committee, and yet from the information we have been able to gather no other plan has as yet either in the American Medical Association or in numerous other state societies been found to be practicable or to yield the results desired.

It is hoped that an expression of opinion from the county society secretaries may be secured at this meeting, and that a sufficient number of applications may be received to enable the committee to make its plans more definite, and to begin its propaganda.

Respectfully submitted,

C. H. STODDARD, Chairman.

DR. McMahon: Mr. President and Gentlemen, I really do not believe that it is the pleasure of the house that this report to the Eleventh Annual Conference on Medical Legislation and Medical Education be read at this time. There have been no changes made in it since it was published in the hand book for the House of Delegates, and there is nothing that the delegate can add to the report as it appeared there. If it is the desire of the house to hear it read, I hope some one else will be kind enough to read it, because my vocal chords are congested and I cannot make myself heard in the rear of the room.

PRESIDENT: Gentlemen, what is your pleasure?

DR. H. REINEKING, Milwaukee: I move that this report be accepted and placed on file as printed.

Motion seconded.

Motion put and carried.

REPORT OF THE DELEGATE TO THE ELEVENTH
ANNUAL CONFERENCE ON MEDICAL LEGISLATION AND MEDICAL EDUCATION.

To the House of Delegates of The State Medical Society of Wisconsin:

Pursuant to a request of the President, the undersigned represented The State Medical Society at the Eleventh Annual Conference on Medical Legislation and Medical Education, held under the anspices of the Council on Health and Public Instruction and the Council on Medical Education of the A. M. A., at Chicago. February 15th and 16th.

The Conference was followed, on February 17th, by a joint meeting of the Association of American Medical Colleges and the Federation of Boards of Medical Examiners of the United States.

This arrangement brought about two hundred and fifty delegates, representing the State Medical Societies, the State Boards of Health, the State Boards of Medical Examiners, the Association of American Universities, Undergraduate and Postgraduate Medical Schools, the United States Bureau of Education, the Carnegie Foundation for the Advancement of Teaching, all of which boards and association are interested in public health measures and medical education, into one general conference.

As you are aware, a great deal of the constructive work done by the A. M. A. during the last ten years has been accomplished by the Council on Health and Public Instruction and the Council on Medical Education. Owing to the multiplicity of problems and questions considered, the work was necessarily delegated from time to time to subcommittees. In order to give you a more comprehensive idea of the problems under consideration at the present time, a list of the subcommittees of the Councils will be included here. Those of the Council on Health and Public Instruction are as follows:

Women's and Children's Welfare,

Conservation of Vision,

Cancer,

Expert Testimony,

Co-operation with the National Educational Association, and

Uniform Regulation of Membership.

The Council on Medical Education has but one subeommittee proper at the present time, viz.: that on Graduate Medical Instruction. It has, however, State Advisory Committees on the Standardization of Hospitals, the duties of which are to improve the hospital service in the several states and to compile a list of those in each state which afford adequate opportunities and facilities for an intern service.

Dr. G. E. Seaman of Milwaukee is a member of the subcommittee on Expert Testimony, and Dr. N. M. Black of Milwaukee is a member of the subcommittee on the Conservation of Vision.

The three day program included:

Reports of the Chairman of the Councils, Dr. Henry B. Faville and Dr. Arthur Dean Bevan.

Reports of the Committee on Medical Expert Testimony.

Presentation and discussion of a Model Bill for the Prevention of Ophthalmia Neonatorum.

Presentation and Discussion of a Model Bill Providing for State Boards of Health.

A paper on State Regulation of Those who Treat the Sick, by Governor G. H. Hodges of Kansas.

A paper on the University and Higher Degrees in Medicine, by President G. E. Vincent, University of Minnesota, which paper was discussed by Harry Pratt Judson, President of the University of Chicago.

A paper on Courses and Degrees in Public Health Work.

A paper on the Preparation of Specialists in Ophthalmology and Oto-Laryngology.

Report of the Committee on Graduate Medical Instruction.

Preliminary Report on the Standardization of Hospitals.

Some Thoughts on the Work of State Boards of Medical Examiners, by John Huston Finley, Commissioner of Education of the State of New York.

Classification of Medical Colleges, by Henry S. Pritchett, President of the Carnegic Foundation for the Advancement of Teaching.

A paper on Fallacies in the Argument Against Full Time Clinical Instructors.

And a paper on the Minimum Expense of the Laboratory and Clinical Departments of an Acceptable Medical College.

A glance at the program is sufficient to convince one of its excellence and comprehensiveness, and the eminence of the lay talent which presented the different subjects marked a new epoch in this field of endeavor. To those of the profession who for a half century have waged an unaided fight for medical ideals and for ideal public health measures, it should be a source of gratification to learn that governors, lawyers, educators, scientists and the representatives of different national educational organizations have at last actively interested themselves in efforts to promote the physical and mental welfare of the people—a duty which is quite as much theirs as it is the special duty of the medical profession to indicate the means by which these welfares can be best conserved.

The Committee on Medical Expert Testimony presented a model bill which was drafted with the assistance of the American Institute of Criminal Law and Criminology. The bill was endorsed by the Conference. A model bill designed to prevent blindness was also outlined.

Tentative drafts of bills providing for the state regulation of public health and for the practice of medicine were presented as basis for discussion. As might have been anticipated, divergent views were expressed. The consensus of opinion with reference to these subjects fell far short of what your representative would consider even an approach to the ideal. This statement is especially true with respect to the bill proposed by Governor Hodges of Kansas.

Considerable progress has been made, however, parti-

cularly in the matter of collecting facts with reference to federal public health activities and to the activities. equipment and accomplishments of various state boards of health, information on which was compiled by Dr. Charles V. Chapin, Commissioner of Health of Providence, R. I. A superficial study of municipal public health departments and an investigation of the many voluntary public health organizations throughout the country have been made. Considerable work has also been done by way of teaching the public to utilize modern scientific medical knowledge in the prevention of disease, the reduction of the death rate and the prolongation of life. As a result of this enlightened public opinion, there should, and there undoubtedly will, follow a more general enactment of adequate public health laws and the adoption of regulations and ordinances which will be the more fruitful, because they will be better understood and therefore more generally observed. It is probable that the next midwinter conference will be devoted exclusively to a discussion of state regulation of public health and state regulation of the practice of medicine, and it is likely that the Councils will continue to arrange for discussions of allied subjects during these conferences until model bills designed to meet the requirements of all medical, health and sanitation problems, which are proper subjects for legislative enactment, shall have been framed.

The question of improving hospital service and of extending the course in medicine so as to provide for a fifth or a hospital internship year was discussed a number of times during the meeting in connection with other subjects. The majority opinion seemed to be that an internship is practically a sine qua non, but that, if made a prerequisite to graduation, the service in the different hospitals should be under the supervision of medical colleges or of some other responsible directing authority; that, while there are enough hospitals in the United States to provide an ample number of internships for all students of medicine, the number of institutions affording an acceptable internship service is inadequate at the present time. There are also those who believe that the medical course should be rearranged so as to make it possible for a student to secure hospital service without extending the duration of the course. They argue that it would be a mistake to increase the age at which physicians enter upon practice and that the necessary training can be imparted in four years to students who have had the equivalent of two years' college work before undertaking the study of medicine.

There are six medical colleges which have announced a policy of requiring that a fifth year be spent serving an internship in an approved hospital or other acceptable clinical work before a degree will be granted. The colleges exacting or about to exact this requirement are:

The University of Minnesota Medical School.

Leland Stanford Junior University School of Medicine. Rush Medical College.

University of California College of Medicine.

Northwestern University Medical School.

And University of Vermont Colleges of Medicine.

The State Licensing Board of Pennsylvania adopted the internship service requirement in 1914 and the service must be taken in a hospital approved by the Board. The New Jersey Licensing Board has adopted the same requirement and it will become effective in 1916. Some of the representatives of schools in the middle and western states are somewhat conscrvative in their advocacy of this plan, because of a fear that they may not be able to secure a sufficient number of acceptable internships for their students.

Your delegate attended a special session of the State Advisory Committees on the Standardization of Hospitals as a guest of the chairman of the Wisconsin committee. The transactions during this meeting convinced your representative that both the Council on Medical Education and the Advisory Committees consider that the standardization of hospital equipment and service is an important subject, that it is a proper one for the American Medical Association to take up, that it will be difficult and somewhat costly task to do it properly and that it will require the services of some one especially qualified to make a tour and a personal inspection. There seemed to be an impression that possibly the Carnegie Foundation for the Advancement of Teaching or some other foundation would finance the undertaking.

The Council on Medical Education announced its fifth classification of the one hundred medical colleges then existing in the United States into classes "A", "B" and "C", thereby discontinuing the "A plus" classification adopted in 1912.

Class "A" comprises those which are worthy of recognition by the State Licensing Boards. There are sixty-seven in this eategory.

Class "B" includes those schools, the character of the work and the future of which is uncertain and the recognition of which should be carefully determined by the State Boards themselves. This class numbers nineteen.

Class "C" contains those colleges which the Council believes are wholly unworthy of recognition by the State Boards. The number in this list is fourteen.

It should be a source of satisfaction to the members of the Wisconsin profession to learn that both the Wisconsin schools were included in group "A".

In conclusion, your delegate was impressed with the high-minded, conscientious, time-consuming and far-reaching service which the leaders of American medicine are rendering the public, and the profession as well, and he is prompted to inquire whether or not the rank and file are putting forth an equally honest and determined effort to follow in the trail which these leaders are so nobly blazing.

Respectfully submitted,

J. P. McMahon, Delegatc.

PRESIDENT: The next order of business is the report of the Delegates to the Annual Meeting of the American Medical Association, Dr. A. H. Levings, Chairman.

Dr. L. M. Warfield, Milwaukee: Can we not take this report as published and pass upon it and save time?

PRESIDENT: Yes, if it is your desire.

Dr. Warfield: I move that this report, which certainly can be read by all the members present, be accepted and placed on file.

Motion seconded.

Motion put and carried.

## REPORT OF DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION.

To the Members of the House of Delegates of the Wisconsin State Medical Society:

The House of Delegates of the American Medical Association met in the Exposition Memorial Auditorium, San Francisco, Monday morning, June 21st, and was called to order by the President, Dr. Victor C. Vaughan. The Committee on Credentials reported thirty-six members present.

Dr. Vaughan in a short address stated that medicine was advancing so fast that the recent graduates even from the best schools were failing to keep up with the times. He suggested that it might be possible for the American Medical Association to send to different States teachers versed in the latest and best methods of clinical diagnosis.

He also stated that the laity had been so educated in the methods of preventive medicine that they were taking the place of the physician in social and sanitation work. He thought the medical schools were not educating enough men in preventive medicine and that they should offer special courses on this subject. Following these remarks by Dr. Vaughan, the report of the Board of Trustees was called for and following this the report of the Judicial Council.

The report of the latter is most interesting in that it deals largely with the workmen's compensation acts.

The Judicial Council also reported that charges had been preferred against two members for advertising. One member had persisted in advertising in the public press, and as no excuse or apology was offered, the Committee recommended that his name be dropped from the Fellowship roll of the American Medical Association.

In the second case it was held that the accused had caused or permitted to appear in an article, with which his name was connected, a photograph and self-laudatory explanations. The Council held that this was contrary to the principles of medical ethics, and condemned the publication in question as being offensive and in bad taste but accepted the defendant's explanation and apology.

The Council on Health and Public Instruction reported the work which they had done to determine the present public health conditions. They maintain a bureau for the education of the public by popular lectures and by the distribution of pamphlets on public health subjects.

The Committee on Cancer and that on Expert Testimony as well as the Committee on Medical Education reported at this meeting.

At the second meeting of the House of Delegates, Monday afternoon, the Committee on Sections and Section Work reported. They made the following recommendations:

First—The division of the sections into four groups.

Second—The creation of a standing committee whose duties it should be to assist section officers, to help in the development of continuous policies, and advise the house of Delegates in regard to the creation of new sections or the consolidation of old ones. The Committee recommended that the work of the Association be divided as follows:

## First—Medical Sciences—

Anatomy		<b></b>	 1	${\it session}$
Physiology	y		 1	${\rm session}$
Pathology			 1	${\it session}$
Bacteriolo	gy		 1	session
Pharmaco	logy		 1	${\it session}$

## Second-Medicine-

Practice of Medicine5	sessions
Diseases of Children5	sessions
Mental and Nervous Diseases4	${\it sessions}$
Preventive Medicine, Public Health and	
Hospital4	sessions

## Third-Surgery-

General Surgery5	sessions
Obstetrics and Gynecology	sessions
Genito-Urinary Surgery4	sessions
Orthopedics $\dots \dots	sessions

## Fourth-Specialities-

Ophthalmology5	sessions
Laryngology, Otology and Rhynology5	sessions
Dermatology4	sessions
Stomatology, Gastroenterology and Proc-	
tology	sessions

Protology and gastro enterology were added to the section of stomatology because the latter had been so very weak. The recommendations of the Committee were adopted.

Tuesday afternoon, June 22nd, the House of Delegates met and was called to order by the President, Dr. William L. Rodman.

This session was taken up almost entirely with the report of the Reference Committees.

The Fourth meeting was held on Tuesday afternoon. The first business after calling the roll was the election of officers, the result was as follows:

President, Rupert E. Blue, Washington, D. C. First Vice-President, Albert Vander Veer, Albany, N. Y.

Second Vice-President, George B. Evans, Dayton, Ohio

Third Vice-President, Donald Campbell, Butte, Mont. Fourth Vice-President, Herbert C. Moffit, San Francisco, Cal.

Secretary, Alexander B. Craig, Chicago, Ill.

Treasurer, William Allen Pusey, Chicago, Ill.

Trustees, M. L. Harris, Chicago, Ill., William T. Councilman, Boston, Mass., Thomas McDavitt, St. Paul, Minn.

Detroit was decided upon as the next meeting place.

Dr. William L. Rodman in his presidential address strongly urged the recognition of a National Board of Medical Examiners which was being formed. He stated that this Board was to hold its first examination in Washington, from the Fourth to the Eleventh of October. It was stated that the Board was in no way to take the place of the State Examining Boards, but it was thought that the result of the examination of the National Board would be approved by the several State Boards without further examination. Also that those who passed the National Board should have the option of becoming members of the Reserve Corps of the Army or Navy. Dr. Rodman stated that the Board would probably consist of the following:

Admiral William C. Braisted, Surgeon General United States Navy.

Major General William C. Gorgas, Surgeon General United States Army.

General Rupert Blue, Surgeon General U. S. Public Health Service.

Colonel Lewis A. La Garde, United States Army, Treasurer.

Assistant Surgeon General W. C. Rucker, U. S. Public Health Service.

Commander E. R. Stitt, United States Navy.

Dr. Herbert Harlan, Representing the Confederation of State Boards of Examiners.

Dr. Isidore Dyer, Representing the Association of American Medical Colleges.

Dr. E. Wyllys Andrews, Representing American Colleges of Surgeons.

Dr. Lewis B. Wilson, Representing the Mayo Foundation.

Dr. Victor C. Vaughan, Representing the American Medical Association.

Dr. William Rodman, Sec., Representing the American Medical Association.

This portion of the President's address was referred to the Committee on Reports of Officers. The majority report favored its adoption. The minority favored its reference to the Committee on Medical Education. The minority report was adopted.

The House of Delegates adjourned.

Respectfully submitted,

A. H. LEVINGS, Chairman.

PRESIDENT: The report is accepted, and the next order of business is the report of the Chairman of the Council. This report I think was sent in. It does not appear in the handbook.

SECRETARY: Dr. Evans, the Chairman of the Council, has written me that he will be unable to be here, as he has been and is at present in California, and as Chairman of the Council he had little to report, outside of the January meeting. The minutes of the January meeting was published in the July Journal, which doubtless all of you have seen. No important action was taken at

that time with the exception of the re-election of Dr. Hall and myself as treasurer and secretary respectively, and the increasing of the number of the Committee on Public Policy and Legislation from 3 members to 8 members.

DR. McMahon: The council authorized the increasing of the membership to seven, and the chairman of the council, as a result of your chairman's request, took it upon himself to increase it to eight, so that a representative of the Wisconsin Eye. Ear, Nose and Throat Specialists could be placed on the committee to keep track of proposed legislation affecting the practice of so-called optometry.

SECRETARY: That is practically all the business that came before the council at that time.

PRESIDENT: We will let that report stand without further action, and the next order of business is the reports of the councilors. In the order of the number of the district, we will have the report of the councilor.

The report of the councilor from the 1st District was presented by Dr. M. R. Wilkinson, Oconomowoc, as follows:

Mr. President and Gentlemen: I have a very brief report to make. The 1st District comprises the counties of Dodge, Jefferson, Washington and Waukesha. Good work has been done in each of the four counties

As to membership, Dodge County last year had a membership of 36, and this year also a membership of 36.

Jefferson last year a membership of 34, and this year 31, a loss of 3, 2 deaths and 2 removals, a gain of one.

Washington last year 14 members, and this year 16, a gain of two, and 2 deaths, with one removal. new members 3.

Waukesha last year 40, this year 45, a gain of 5, with only one delinquent and one removal. There is really a gain of 6 members.

Each county has held meetings at the regular stated times, and with good programs. The district comprising the 4 counties had one meeting at Juneau, which was very well attended, and a good program was rendered, enjoyed and appreciated by all present.

We look forward to still better work another year, and consider that the last year has been the best in the history of the Medical Society in the 4 counties.

PRESIDENT: I think we will accept these reports without any vote. Dr. Windesheim is the councilor for the 2nd District.

The report of the councilor for the 2nd District was presented by Dr. G. Windesheim, Kenosha, as follows:

DR. G. WINDESHEIM: Mr. President and Members. In the 2nd District the total number of members last year was 101, and this year the same number. We had 2 removals and 6 new members, and some delinquents.

Kenosha County has lost 3 members. I think they lost 4 and gained one, a loss of 3 over what it was last year. This loss is made up by Walworth County, with a gain of 3.

The reasons for those losses are the following: in one instance a member simply wanted to quit a year or two ago, and finally made up his mind he would not remain a member any longer. Another member was on the list of active members, when he was in reality an honorary member and ought not to have been on the list of active members. He was on that list through mistake of the county sccretary in sending in the name of an honorary member as an active member.

As reported last year, we have some little friction in one of our counties in regard to contract work, and that is one reason why some of the members of the County Society are dissatisfied with the Society. However, I am rather optimistic, and I believe that they will eventually see the error of their ways and come back again. While it is to be deplored that such a thing as contract work exists in the medical fraternity, it nevertheless does exist, and if we were to expel all the members that took contracts, we would have a very small number of members in the county societies.

I have not been able to get the report from Walworth County owing to the fact that our secretary had arranged differently this year from the custom in previous years. Heretofore a blank was sent to the secretary of the County Society, in duplicate, one to be sent to the secretary of the State Medical Society, and the other to be sent to the councilor, from which the councilor could make up his report for the district. I have the report of but one county here, which was sent to me in the shape of a letter, and that is Racine County, and which shows that Racine County with a membership of 39, holds meetings quarterly, with an average attendance of 14, the greatest 18, and the least 10.

The programs were very good. I have been at some of the meetings, and the programs are usually good and the meetings well attended.

During the last summer Walworth County has had to contend with a great deal of rain, like the rest of the country, and consequent bad roads, and some of the meetings which had been set for certain days could not be held for that reason. I believe there is no town in Walworth County with more than 8 physicians, the rest of them being spread all over the county, and for that reason their meetings have not been as well attended as in former years. They hold 4 meetings a year, and in addition hold occasional evening meetings, going from one place to another, sometimes every month, and sometimes every two months, if the roads are so that they can go. The programs are generally very good, and the interest, and medical and fraternal spirit is very good.

Kenosha County holds meetings every month, and within the last year they have followed the program of former years, and have invited men of prominence from either Chicago or Milwaukee, to give a talk on some subject.

Taking it altogether, I think the report for the second year is favorable, although we have no increase in membership.

PRESIDENT: Thank you, Dr. Windesheim. I think the troubles they have down there in the 2nd District are endemic in the state.

The report of the councilor from the 3rd District will be presented by Dr. Nye.

The report of the councilor of the 3rd District was presented by Dr. F. T. Nye, of Beloit, as follows:

DR. F. T. NYE: The annual condition in the 3rd District medically is slightly chaotic. The total number registered to date is 221, with the loss of sixteen, including eleven delinquents. I consider this very good.

One of our members, E. F. Woods, sacrificed his life owing to his allegiance to his Fatherland. Two other deaths, three resignations, with six removals and only seven new members keeps our quota remarkably near to normal.

I have little, if anything, to say about our new legal status, as the laws medically are passed upon in our District. I have too little acquaintance with them to pass an opinion. One large enthusiastic District meeting in the month of June was hugely enjoyed owing both to the quality of the

papers presented, and scientific spirit shown during their active discussion. The spirit of fraternal good fellowship shown in the combined outing at Lake Delavan in which Rock County and Walworth joined late in June, was enthusiastically closed with a banquet at which two hundred were present, including the doctors and their wives.

DR. G. WINDESHEIM, Kenosha: Dr. Nye has just mentioned a meeting that I overlooked. The reason that I did overlook it is that it seemed more of a family affair than a public affair. The doctors of the District responded very well, and we had invited the members of the Lake County, Illinois, Medical Society. The meeting was a grand success, due chiefly to the fact that the president of our State Society was present, and our honored secretary and treasurer. They enlivened the meeting.

PRESIDENT: The report of the councilor from the 4th District will be presented by Dr. Cunningham.

The report of the councilor for the 4th District was presented by Dr. Wilson Cunningham, Platteville, as follows:

DR. WILSON CUNNINGHAM: Mr. President and Gentlemen: The membership of the District is practically the same as in previous years. We have 99 in place of 100 last year. There are 5 delinquents and 3 removals. This is made up by an increase of 8 new members. The loss of one is due to the suspension of one member, a doctor in Dodgeville, for unprofessional advertising in local papers, contrary to the code of medical ethics. He was suspended for one year.

The general professional spirit, I think has improved throughout the district and the general interest in the meetings I think is also improved. Conditions are about the same otherwise.

PRESIDENT: Thank you, Dr. Cunningham.

The report of the 5th District will be presented by Dr. Zierath.

The report of the councilor for the 5th District was presented by Dr. W. F. Zierath, Sheboygan. as follows:

DR. W. F. ZIERATH: The report from the 5th District will be very short and sweet. We are just the same size as we were last year, 86 members. 2 delinquents, 2 removed, and 4 new members. With this exception, that was the report that was sent to me by the secretary.

Ten years ago, for a short space of time, there existed a county medical society in Ozaukee County. I am pleased to report that on the 21st of September I succeeded in organizing a new society, with a full corps of officers. There are 14 men practicing in the county; 7 were at the initial meeting. I talked to the secretary of that Society over the long distance Monday, and he said that ten had joined the Society, and he thought that by the time the State Medical Society met he would have the other 4 in as members.

PRESIDENT: Good. I am glad to get that report.

The 6th District will be reported on by Dr. Abraham.

The report of the councilor for the 6th District was presented by Dr. H. W. Abraham, Appleton, as follows:

Dr. H. W. Abraham: The 6th District consists of Brown, Kewaunee, Door, Outagamie, Winnebago and Fond du Lac.

This year we have a total membership of 217, a net gain of 16 members. Last year we had a net gain of 20 new members. Every county has a gain except Door County, which has a loss of one. due to death.

The meetings have been regular, and good work has been done. I can only say that it is because it is such a good territory, and the men are working so harmoniously that we can make such a good report.

PRESIDENT: From the nature of your report, Dr. Abraham, I think your District has the honors of having made the largest gain and being among the strongest districts in the state.

The report of the 7th District was read by the Secretary as follows:

"La Crosse, Wis., September 22, 1915.

Dr. Rock Sleyster,

Secretary State Medical Society,

Waupun, Wis.

Dear Doctor:

Reporting for the Seventh District, I am happy to say that from the standpoint of membership I believe we are in excellent shape.

From the scientific standpoint as much cannot be said. Not even La Crosse County Medical Society, which is the largest and most active society in my district, has been maintaining a good standard of scientific work.

What is of some importance, however, I think is to have the spirit of good fellowship and cooperation bettered and this has, I believe, distinctly advanced during the past year in the Seventh District.

With regrets that I must be absent from the State meeting, and with sincere wishes for the best meeting ever held, I am

Yours sincerely,
E. Evans,
Councilor 7th District.

PRESIDENT: The 8th District, your humble servant wishes to say is just about in its normal state, that is, its normal state for 1914. We have neither lost nor gained for the district. The individual counties have fluctuated a little. Oconto County is not doing anything. Shawano is holding regular meetings, and is in a flourishing condition.

Generally speaking I think the professional spirit is good. We enjoy each other, and enjoy our meetings, and some of them have been very very good. During the past year we had two meetings, at which stereopticon views were used to elevate papers, and the papers were of a high scientific order.

That is really all that I have to say for the 8th District.

The 9th District will be reported on by Dr. Hay. I think he has left the room.

The 10th District will be reported on by Dr. Cairns.

The report of the 10th District was presented by Dr. Rollo Cairns, of River Falls.

Dr. Rollo Carrs: The 10th District comprises seven counties and our total membership a year ago was 148, and this year it is 149, a gain of one. There are still 9 delinquents. 4 of these are in the large Society of Barron, Polk, Washburn, Sawyer and Burnette Counties, where there has been considerable controversy over a question which has already been spoken of, of contract practice, and these men, at least part of the 4, and I think all of the 4, are out of the Society on account of the ruling on contract practice work.

In the entire district there has been one death and two removals, and 13 new members. With the exception of Barron, Polk, Washburn, Sawyer and Burnette, the societies in the District are in their usual good working order. This Society has been one of the best societies in my district, being a large society, and covering considerable territory, but owing, perhaps, to some jealousies, and also to the difficulty over contract practice work, it is not in as good working order as it should be, and I have promised to visit it in the near future and try to put them in a little better shape.

PRESIDENT: Dr. Dodd will report on the 11th District.

Dr. J. M. Dodd, Ashland, presented the report of the councilor of the 11th District, as follows:

Dr. Donn: Mr. President, the 11th District is composed of ten counties, the first group being Ashland, Bayfield and Iron, the membership last year was 22, and this year 22.

Douglas last year 35, this year 33.

Langlade last year 13, this year 14.

Oneida-Vilas, another group, the membership 12 last year, and 11 this year.

Price-Taylor, the membership last year was 10, and this year 12.

The totals for last year were 92, and this year 93.

There are perhaps 15 or 20 physicians in this district over and above this number, who are not members. Either they are ineligible, or do not see fit to come in with us.

The condition as far as the scientific spirit is concerned and the spirit of get-together, is about the same as last year. There seems to be very little change from year to year in that direction.

I wish to say that the fact that our district has kept up its membership, and has made a little gain, is due more to the efficiency of the secretary of the State Medical Society than to the councilor of this district.

PRESIDENT: The 12th District will be reported upon by Dr. Dearholt.

The report of the councilor for the 12th District was presented by Dr. Hoyt E. Dearholt, Milwaukee, as follows:

DR. HOYT E. DEARHOLT: Mr. President, and Gentlemen: The 12th District is composed solely of the Milwaukee Medical Society of Milwaukee County.

The affairs of the district have never been in better shape, I believe, than at the present time, both as to the scientific papers, and as to the good fellowship among the membership. These to my mind, are the most important considerations.

Of less importance is the gain in membership, from 319 at this time last year, to 337, a gain of 18, which I believe takes Dr. Abraham's laurels from him. I will take his laurels also when he claims that he had no responsibility. I can prove that I have had no responsibility for the good showing in Milwaukee County, it being due to the officers of the Milwaukee County Society.

PRESIDENT: That disposes of the councilors.

I am very certain, from my observation with physicians in passing through the state, that the greatest factor in creating dissention between physicians is the question of contract practice and underhanded methods. It really splits communities into factions, and is a serious problem. Men get together and agree not to do certain things; then there will be a black sheep among them who will repudiate his agreement and go right on with the contract work as before.

The next order of business is the report of the treasurer. If Dr. Hall is still here, we will hear from him.

The report of the treasurer was presented by Dr. S. S. Hall, Ripon, as follows:

#### TREASURER'S REPORT.

Milwaukee, Oct. 5. 1915.

S. S. HALL, TREASURER, IN ACCOUNT WITH THE STATE MEDICAL SOCIETY OF WISCONSIN.

### Debtor.

Balance on hand October 7, 1914\$3,739	.86
Received from Secretary for County dues	.00

Total ......\$7,306.8

## Creditor.

Creation,		
1914— Dec. 26—Wisconsin Medical Journal	00.009	
1915—	000.00	
Sept. 6—Wisconsin Medical Journal	900.00	
Wisconsin Medical Journal	25.00	\$1,725.00
1915—		, -,
Jan. 15—H. W. Abraham, Councilor Expense	3 14.60	
Feb. 5—H. E. Dearholt, Councilor Expense	10.80	
Apr. 7—Rollo N. Cairns, Councilor's Lunch	21.28	46.68
1915—		
Mar. 4—S. E. Tate, Expense Com. P. P. & L.	4.50	
May 11-J. P. McMahon, Expense Com. P. P. & L.	100.00	
Sept. 27—J. P. McMahon, Expense Com. P. P. & L	36.69	141.19
1914—		
Oct. 13—Volksfreund Pub. Co., a/c Secretary		
Rock Sleyster, Expense Secretary	7.09	
Oct. 20—Waupun Democrat, a/c Secretary	5.25	
Chas. Sheldon, Expense Secretary	32.95	
Jan. 7—Rock Sleyster, Expense Secretary	15.42	
The Globe Wernicke Co., Chicago	5.05	
The Schwaab Stamp & Seal Co	1.14	
Mar. 3—Rock Sleyster, Expense Secretary	37.08	
Mar. 4—Siekert & Baum Stationery Co	8.94	
Mar. 10—Appleton Volksfreund Publishing Co	55.50	
June 7—Reeves Duplicator, a/c Secretary	3.65	
July 9—Rock Sleyster, Expense Secretary	87.21	
Henry Sullivan Engraving Co	5.75	
Aug. 17—Rock Sleyster, Expense Secretary	39.38	
American Medical Association	2.50	
Sept. 28—Rock Sleyster, Expense Secretary	9.94	355.10
1914—		
Oct. 20—Athearn Hotel, Luncheon County Secretaries	\$ 11.85	
1915—	001 70	
July 21—Goodwin, McDermott & Cowen, Steg	261.70	
Rock Sleyster, Salary	300.00	
S. S. Hall, Salary S. S. Hall, Incidentals	200.00	702 55
5. S. Han, incidentals	20.00	793.55
Total		\$3,059.52
Balance on hand		4,247.34
Total	• • • • • • • • •	\$7,306.86
S.	S. HALL.	

The undersigned auditing committee appointed by the House of Delegates has examined the report of the treasurer and find the same correct.

J. M. DODD, ROLLO CAIRNS, H. W. ABRAHAM.

## TREASURER'S REPORT.

## MEDICAL DEFENSE FUND.

Milwaukee, Wis., October 5, 1915.

S. S. HALL, TREASURER, IN ACCOUNT WITH THE STATE MEDICAL SOCIETY OF WISCONSIN.

## Debtor.

Balance on hand October 7, 1914\$ 540.	
Received from Secretary for County Ducs	.00
Total	.24

#### Creditor.

1914		
Oct. 21—Lines, Spooner, Ellis & Quarles\$	500.00	
-		
1915—		
Feb. 17—Lines, Spooner, Ellis & Quarles	499.65 \$ 999.65	
· -		
Total	\$ 999.65	
Balance on hand	2,848.59	
Total	\$3,848.24	
	S. S. HALL.	

The above report has been examined by the undersigned auditing committee appointed by the House of Delegates and found to be correct.

J. M. DODD, ROLLO CAIRNS, H. W. ABRAHAM.

PRESIDENT: What is the pleasure of the House with reference to the report of the treasurer?

Dr. H. Reineking, Milwaukce: I move that it be received and referred to the Auditing Committee.

Motion seconded.

Motion put and carried.

PRESIDENT: What is your further pleasure? The hour is now 11:15.

Dr. D. J. Hayes, Milwaukee: I move that we adjourn to meet in the Club Room at 9 A. M. tomerrow.

Motion seconded.

Motion put and earried.

Adjournment to 9 o'elock A. M., Oet. 6th, 1915.

## SESSION OCTOBER 6th, 1915, 9 A. M.

Meeting ealled to order by the President.

PRESIDENT: The House of Delegates will come to order. We will resume business at No. 19. Before proceeding, however, we will have the minutes of the previous meeting read, and the roll eall.

Roll ealled by the Secretary.

DR. W. F. ZIERATH, Sheboygan: Does it require any formal action of the State Medical Society to admit a new County Medical Society into this House of Delegates?

PRESIDENT: I think not. I believe that rests entirely with the eouncil. Am I correct, Dr. Windesheim, in the assumption that the admission of a new county society rests entirely with the council?

DR. G. WINDESHEIM, Kenosha: Not entirely. The constitution conflicts there somewhat. The

House of Delegates can act on it, and recommend it to the council, but the council can act on it independently of the House of Delegates.

PRESIDENT: At the proper time, Doctor, I suggest you submit your application.

DR. W. F. ZIERATH: When would be the proper time? Might they have a delegate?

PRESIDENT: We are under regular business, and there will come a time a little later. The roll has been ealled. I think the reading of the minutes of the previous meeting is in order.

The minutes of the previous meeting were read by the secretary and approved as read.

PRESIDENT: The next order of business is the report of the secretary.

The secretary, Dr. Rock Sleyster, Waupun, presented his report as follows:

REPORT OF THE SECRETARY FOR JAN. 1ST TO OCT. 1ST, 1915.

The last fiscal year closed Dec. 31st, 1914, with the usual 53 component county societics. The total membership at that time was 1743, the largest in the history of the society and that number has been increased this year by the reinstatement of delinquents so that a total of 1760 paid dues in the state society for the year 1914.

That we may feel well satisfied with the progress of the State Medical Society of Wisconsin in organization is shown by the attached table issued to the 1915 House of Delegates of the American Medical Association. Wisconsin is shown this year to have worked it's way to the very top as the best organized state in the union with a percentage of 73 (physicians in the state, members of the state medical society).

The incomplete report for the present year, 1915, follows and you will bear in mind that three months remain for active work. Attached is a detailed statement showing the 1914 membership complete, the 1915 membership

New Members

to date, losses or gains, delinquents, deaths, removals from the state, resignations and new members-this given for each county and district society of the state.

from the state, resi												ent		x	_
given for each count								County Society	31		+ 1	n Da	132	val	mec
									191 <del>4</del> Dec. 31	1915 Oct. 1	Gain+ Loss-	Delinquent	Deaths	Removals	Resigned
MEMBESHIP	REPO	ORT, C	CT.	1ST,	191	5.			Ã	<u> </u>	७५		l Ă	1 22	=
								7th District—							
		1	nt	1	l			Juneau	12	12	0	0	0	0	0
County Society #			Delinquent	ren.	Removals	pot	New Members	La Crosse	36	38	+2	0	0	0	1
County Society	1915 Oct. 1	Gain+ Loss-	lin	Deaths	non l	Resigned	New	Monroe	19	19	0	0	1	0	0
191 Dec.	0et	Gai	De l	Deg	Rei	Res	Me	Trempealeau-							
								Jack'n-Buffalo	25	27	+2	0	0	2	0
1st District—								Vernon	11	14	+3	0	1	0	0
Dodge 36	36	0	1	0	0	0	0	_				_	_	_	
Jefferson 34	31	3	1	2	2	0	3	Total	103	110	+7	0	2	2	1
Washington . 14	16	+2	0.	2	1	0	3	10001	100		, .		_	_	
Waukesha 40	45	+5	1	0	1	0	8	8th District—							
			_	_		_		Marinette-							
Total 124	128	+4	3	4	4	0	14	Florence	27	26	l	1	1	0	l
								Oconto	7	6	—l	l	()	0	0
2nd District—								Shawano	20	22	+2	0	0	2	0
Kenosha 36	33	3	4	0	0	0	1	-				—		_	—
Racine 39	39	0	1	0	2	0	3	Total	54	54	0	2	1	2	1
Walworth 26	29	+3	0	0	0	0	2	9th District—							
	—		—	—		_			10	17	l	0	1	0	0
Total 101	101	0	5	0	2	0	6	Clark G. Lake-Washa		1 4		v	1	U	V
out District								ra-Adams .	29	25	-4	3	1	l	1
3rd District—								Lincoln	11	12	+1	0	0	0	0
Dane 106	96	10	5	2	5	3	3	Marathon	37	36	—l	1	2	0	1
Columbia 30	30	0	0	0	0	0	1	Portage	22	21	—l	î	0	0	0
Green 19	18	—l	1	0	0	0	0	Waupaca		27	+2	0	0	0	0
Rock 60	56	-4	4	2	0	0	2	Wood		24	+3	0	0	0	0
Sauk 22	21	l	1	0	l	0	l	_					_	_	_
			_	—	—	—		Total	164	163	—l	5	4	1	2
Total 237	221	16	11	4	6	3	7								
4th District—								10th District—							
Crawford 11	9	<b>—</b> 2	2	0	1	0	l	Barron-P							
Grant 46	44	— <u>2</u>	3	0	2	0	4	WSB	32	32	0	4	0	0	1
Iowa 12	15	+3	0	0	0	0	3	Chippewa	22	22	0	2	0	0	1
La Fayette 18	18	0	0	0	0	0	0	Dunn-Pepin	17	18	+1	1	()	0	0
Richland 13	13	0	0	0	0	0.	0	Eau Claire	37	38	+1	0	1	1	0
							Ü	Pierce	14	12 10	-2 + 2	2 0	0	0	0
/// 1 100			_	_	_	_		Rusk St. Croix	8	18	<del>-0</del>	1	0	1	0
Total 100	99	—1	5	0	3	0	8	St. Croix	10	10			_		_
5th District—								Total	148	150	+2	8	1	2	2
Calumet 15	14	—l	0	0	0	2	1.	Total	140	100		,	•	_	_
Manitowoc 24	26	+2	0	0	0	0	2	11th District—							
Sheboygan 47	46	—1	2	0	0	0	1	Ashland-Bay-							
			_	_		_		field-Iron .	22	23	+1	5	()	0	0
Total 86	86	0	2	0	0	2	4	Douglas	35	33	-2	6	0	1	0
10tal 60	30	U	4	U	U	ڪ	4	Langlade	13	14	+1	0	()	1	0
6th District—								Oneida-Forest-							
Brown-								Vilas	12	11	1	3	0	0	0
Kewaunec. 39	42	+3	1	0	1	0	5	Price-Taylor.	10	12	+2	1	0	0	0
Door 11	10	—l	1	1	0	0	1	_				_	_		—
Outagamie 36	38	+2	1	0	0	0	0	Total	92	93	+1	15	0	2	0
Fond du Lac. 51	55	+4	0	1	0	0	5	12th District—							
Winnebago 64	72	+8	0	3	0	0	9		000	9.07	1.4	10	0	4	1
			_	_	_	_		Milwaukee	อฮฮ	337	+4	10	8	4	1
Total 201	217	+16	3	5	1	0	20	Total	1743	1760	+17	<del>7</del> 2	29	29	11

County Society	1914 Dec. 31	1915 Oct. 1	Gain+ Loss-	Delinquent	Deaths	Removals	Resigned	New Members	
MEMBERSHIP REPORT—BY DISTRICTS.									
First	124	128	+4	3	4	4	0	14	
Second	101	101	0	5	0	2	0	6	
Third	237	221	-16	11	4	6	3	7	

Second 101	101	0	5	0	2	0	6
Third 237	221	16	11	4	6	3	7
Fourth 100	99	l	5	0	3	0	8
Fifth 86	86	0	2	0	0	$\overline{2}$	4
Sixth 201	217	+16	3	5	1	0	20
Seventh 103	110	+7	0	2	2	1	13
Eighth 54	54	0	2	1	2	1	5
Ninth 164	163	l	5	4	1	2	11
Tenth 148	149	+1	10	1	2	2	14
Eleventh 92	93	+1	15	0	2	0	13
Twelfth 333	337	+4	10	8	4	1	19
			_	—	—		
Total1743	1760	+17	72	29	29	11	134

## DIGEST OF TABLES.

Six Districts show a gain as follows: 6th 16, 7th 7, 1st 4, 11th 1, 10th 2, 12th 4.

Three Districts show a loss as follows: 3rd 16, 4th 1, 9th 1.

Three Districts remain the same as in 1914, the 2nd, 5th and 8th.

One District only has no delinquents—the 7th. The 12th has 10; the 11th 15; the 3rd 11; the 10th 10; the 2nd, 4th and 9th 5 each; the 1st and 6th 3; the 5th and 8th 2.

The 6th gained 20 new members, the 12th 19; the 1st 14; the 7th, 10th and 11th each 13; the 9th 11; the 4th 8; the 3rd 7; the 2nd 6; the 8th 5 and the 5th 4.

Thirty-two counties are on the Honor Roll. Twenty-four show a gain over the total membership Dec. 31st, 1914, seven are the same and twenty-two show a loss.

The greatest gains were: Winnebago 8; Waukesha 5; Fond du Lac 4; Walworth, Iowa, Brown-Kewaunee, Vernon and Wood 3 each and Milwaukee 4.

The greatest losses were: Dane 10, Rock and Green Lake-Washara-Adams 4; Jefferson 3.

New members have joined 42 counties. The greatest number were: Milwaukee 19; Winnebago 9; Waukesha 8; Douglas, Brown-Kewaunce and Fond du Lac 5 each.

Twenty-three counties have no delinquents. Milwaukee has 10; Douglas 6; Dane and Ashland-Bayfield-Iron 6; Barron, Kenosha and Rock 4.

Total membership Dec. 31st, 1914......1743

The past year has been most satisfactory. The meeting at Oshkosh was the most successful we have ever had. Four hundred thirty-six members registered and while this number has been slightly exceeded at Milwaukee we must take into consideration that over four hundred of these made a rail trip to get to the meeting—nearly 25 per cent. of our membership. This is truly a remarkable demonstration of the interest that is taken in our organization. The county societies report with few exceptions an increase in fraternal feeling and scientific interest. The Journal grows more valuable each year and continues to maintain its high standards. Medical defense has proven its worth time and time again.

During the past year your secretary has visited nine of our component societies. These meetings have been an inspiration and we have returned home with the feeling that all the work was well worth while. We ask for suggestions and help in making the office of more real service to the members. In closing we wish to thank the county secretaries and members of the Council for the splendid help they have unfailingly given us.

ROCK SLEYSTER, Secretary.

PRESIDENT: Gentlemen, the report of the secretary is a very gratifying one to your presiding officer, and it is before you for action.

Dr. Reineking, Milwaukee: I move that the report be accepted and published and placed on file.

Motion seconded.

DR. G. WINDESHEIM, Kenosha: I desire to express to our secretary the thanks of the House of Delegates for the brevity of his report, and the excellent report that he has made. We have been used to listening to reports lasting about half an hour that did not say any more than the secretary did in this short report to-day, and I should like to have it incorporated in the motion that the

report be accepted, and there be in addition this expression of appreciation.

DR. S. S. Hall, Ripon: I rise to second the motion of Dr. Windesheim with the mental reservation that I think the motion is a little too strong; but still I will second it. I do not like to give a man more than his stomach will hold.

PRESIDENT: Gentlemen, if I followed the remarks of Dr. Windesheim, he did not make a motion, but a suggestion.

Dr. Windesheim: A suggestion.

PRESIDENT: Then there is really one motion before the House, that we accept and publish the report and incorporate in that a vote of thanks from Dr. Windesheim and the House of Delegates.

Motion put and carried.

PRESIDENT: The next order of business is the election of delegates and alternates to the American Medical Association, to succeed Dr. Dodd, delegate, and Dr. Hopkinson, alternate. What is your pleasure, Gentlemen? Nominations will be in order.

Dr. G. WINDESHEIM, Kenosha: I should like to put in nomination as delegate to the American Medical Association, Dr. Pecch of Racine.

Dr. H. Reineking, Milwaukee: I wish to nominate Dr. Currens of Two Rivers.

PRESIDENT: The vacancies are: Dr. Dodd, delegate; that would take in your recommendation, I presume, Dr. Windesheim, and Dr. Currens, alternate, replacing Dr. Hopkinson.

Dr. H. Reineking, Milwaukee: No, my nomination is for delegate. We can have more than one candidate. I think we should first select the delegate and then the alternate.

PRESIDENT: All right, that complicates matters, Gentlemen, and will call for a vote by ballot.

SECRETARY: It is very important that we chose a man for delegate to the American Medical Association who we are sure will attend. I do not think it would be a bad idea at this time to do as we did last year, and refer this matter to the Nominating Committee. Let them canvass the situation, find out who is going, and in this way be sure of the man who is elected. Going as a delegate to the American Medical Association is hard work. The man does not see anything of the sessions. It means that he goes there and gives his entire time to the House of Delegates, and too often we have elected delegates on the spur of the moment, and as a result Wisconsin has not been represented in the

House of Delegates of the American Medical Association.

PRESIDENT: Supplementing the remarks of the Secretary, I wish to say that at the eleventh hour I campaigned the state to find someone who was going to San Francisco, to replace a delegate who found out at the last moment that he could not go, and we were fortunate in getting Dr. Hopkinson to go. These nominations are before the House.

Dr. J. P. McMahon, Milwaukee: I should like to supplement Dr. Sleyster's remarks by stating that in my opinion it is a mistake to change delegates each year. A man requires experience and training in the House of Delegates before he becomes valuable to the Society, and it takes two or three years to acquire this experience and training.

Dr. Dodd has not refused to serve, and I want to place him in nomination, inasmuch as he was the delegate last year, has had some experience and would therefore be of service to both this Society and the present organization.

Dr. H. W. Abraham, Appleton: I move that we delegate the nomination of our delegates and committees to the Committee on Nominations, and have them report.

Motion seconded.

PRESIDENT: It has been moved and seconded that the committees be filled by the Nominating Committee, that is, nominations be made to fill the vacancies on committees by the Nominating Committee.

Dr. H. E. Dearholt, Milwaukee: There is a motion before the House.

PRESIDENT: No, I think not; simply nominations, Dr. Dearholt. If there is a motion before the House other than Dr. Abraham's motion, I stand corrected. A nomination is nothing until it is seconded at any rate, and there was no second to any nomination that I recall. With your consent we will drop the nominations and take up the motion, and expedite business. It has been moved and seconded that the Nominating Committee fill vacancies in the several committees. Are you ready for the question?

(Calls for the question.)

Motion put and carried.

PRESIDENT: That pushes forward the work materially. The next order of business then will be the election of councilors. The vacancies to be filled are Dr. Thomas H. Hay of the 9th District, and that of Dr. Rollo Cairns, of River Falls, the 10th District. A councilor is to be elected for the

9th and 10 Districts, and nominations will be in order.

DR. H. W. ABRAHAM, Appleton: 1 nominate Dr. Hay to succeed himself, and move that there be no further nominations, and that the secretary be instructed to cast the ballot of the delegates in favor of Dr. Hay as councilor of the 9th District.

PRESIDENT: Will you take in the other one too, Dr. Cairns?

Dr. Abraham: Yes, if it is allowable, I also include Dr. Cairns for his district.

Motion seconded.

Motion put and carried.

PRESIDENT: The motion is earried, and Dr. Cairns and Dr. Hay are re-elected to fill the office of councilor in their respective districts.

The next business in order is the election of committees and delegates. I am just a little at a loss to know how to proceed here. There is the Committee on Public Policy and Legislation, that would be covered by your motion, Dr. Abraham. The Committee on Medical Education, delegate to National Legislative Council A. M. Λ.—in fact that takes in all those committees, and that would push the work forward to No. 22, which is Miscellaneous Business.

DR. H. W. ABRAHAM, Appleton: I think that there will be some changes in regard to these committees, if we adopt the constitution as recommended by the committee, and of course it will be impossible to go ahead with that until that matter has been settled.

PRESIDENT: If the returns to the work of modifying the constitution results in any changes, that committee will be governed by those changes. Dr. Abraham, and we are still at miscellaneous business.

DR. W. F. ZIERATH, Sheboygan: I move that the Ozaukee County Medical Society be admitted to membership in the State Medical Society of Wisconsin. They already have a delegate, and that delegate attended last night, and this will give him some official status, if the Society is admitted formally.

PRESIDENT: Include that the secretary issue a charter, or the proper documents.

Dr. Zieratii: Yes, whatever the form is; I do not know what it is.

Motion seconded.

Motion put and carried.

PRESIDENT: May I take the time now, Gentlemen, to appoint an Auditing Committee. There

seems to be a slight difference of opinion as to whether that committee should be appointed from the House of Delegates or from the council. It was my recollection that it should be from the council. If you sustain me in that, and I may appoint that committee, I shall be pleased to name Drs. J. M. Dodd, Rollo Cairns and H. W. Abraham, a committee of three, this committee to report to the council, as I understand.

Dr. S. S. Hall, Ripon: The report is read before the House, and the Auditing Committee, I think, properly should report to the House of Delegates, and of course such things would come into the hands of the council anyway.

PRESIDENT: The constitutional attorney will explain.

DR. G. WINDESHEIM, Kenosha: The Auditing Committee is supposed to be selected by the council and report to the council.

PRESIDENT: That is my understanding.

Dr. Hall: I know that perfectly well, but to some extent it is an irregular proceeding to have these reports made to the House of Delegates, and it has always been the habit. I have no objection to changing the habit if that is right. Personally I have no objection to the procedure one way or the other.

PREISDENT: Supplementing what Dr. Hall has said, I should like to say this: it seems to me that it is wiser to have that committee report to the House of Delegates, and bring the matter before the larger body, and for this reason: I observe that too many men in this state know absolutely nothing, and that is not putting it too strongly, about the working machinery of the State Society; they are just drifting. All the information that we can get before the House of Delegates will reach a larger number, and for that reason it is better to have the report made to the House of Delegates, and for that reason we shall ask the committee to report to the House of Delegates.

Is there any further miscellaneous business?

Dr. W. F. Zieratii, Sheboygan: I move that the report of the Special Committee on Revision of Constitution and By-Laws, which was laid on the table, be taken off the table and considered at this time.

Motion seconded.

Motion put and carried.

SECRETARY: (Reading) To conform with action taken by the House of Delegates, we recommend the adoption of the following amendments

which relate to the fiscal year, and the time of meeting of the council. Their adoption is a mere formality, to bring the constitution up to date and confirm previous action by this body.

A motion to amend the constitution in this manner will be in order:

Proposed to add a new section as follows:

"Chapter 2, Section 3. The fiscal year of this Society shall be the calendar year."

PRESIDENT: Gentlemen, what is your pleasure with reference to the plan of procedure. Will you vote on each section as reported by the secretary, or will you bunch the work and adopt en masse?

Dr. V. A. Mason, Marshfield: I move you that all of the articles or amendments up to the point suggested by Dr. Sleyster last evening, and on which everyone was agreed, be adopted in one motion.

PRESIDENT: As I understand it, Gentlemen, the changes up to that point are really a matter of House of Delegate law and Society record, and the incorporating of them into the constitution is just a matter of bringing the constitution up to date, in conformity with our records. That being the case it seems to me that discussion is not called for. Is there a second to the motion?

Motion seconded.

SECRETARY: Mr. President, there is just one exception to that, and that is the creating of a new Committee on Health and Public Instruction, to consist of three members. It has been suggested that we appoint a small committee of three members to take the place of the old Committee on Prevention of Tuberculosis and the Publicity Committee created a year ago, two large and cumbersome committees, which have been rather inactive, and to concentrate their activities in one small committee of three, to correspond with a similar committee in the American Medical Association. That is the only exception. Aside from that, the amendments proposed are simply to bring the constitution up to date.

PRESIDENT: Will Dr. Mason modify his motion to include the comment of the Secretary, or shall we act on it?

SECRETARY: The motion really includes this. PRESIDENT: The motion really includes it, if it is satisfactory to the House it will be included in this vote.

Motion put and carried.

PRESIDENT: The motion prevails, and the alterations in the constitution are made up to and including.

Dr. H. E. Dearholt: Has the House of Delegates power to amend the constitution, or must that be referred to the general membership?

SECRETARY: The House of Delegates does that. Dr. Dearnolt: Has the power?

Secretary: Yes.

PRESIDENT: That is the way I understand. That includes the amendments up to the middle of page 31, of the Hand Book for the House of Delcgates, Article 9, Section 1, and including Chapter 8, Section 1, at the top of that page.

SECRETARY: 'The only other amendment for your consideration relates to electing a president and a president-elect this year, and at each future meeting electing a president. You know the committee recommendations in this matter. It probably is unimportant, but other state societies have practically all followed the course of the American Medical Association in having at one time a president-elect and a president. The argument in favor of this is simply that the office is often thrust on a man without his being prepared, or having a chance to give much thought to the matter, and if he is elected a year in advance, he has ample opportunity to become familiar with all the many little details of society work and it was supposed that he could carry out the office in better shape. The committee has no recommendations to make on this, but while we are bringing the constitution up to date, we thought it would be well to bring it before the House of Delegates for discussion.

President: I am unable to comment on the doctor's remarks.

Dr. Wilson Cunningham, Platteville: In order to bring the matter before the House of Delegates, I move that we adopt that recommendation, and amend the by-laws accordingly, or the constitution.

Secretary: That would include this: "At the election of officers at the session of 1915, there shall be elected a president who shall enter upon the duties of his office at once, and also a president-elect who shall enter upon the duties of the presidency one year later. Therefore, the president-elect shall enter upon the duties of the presidency one year from the date of his election. Should a vacancy occur in the office of president-elect, it shall be filled by the House of Delegates

at the next annual session by the election of a president and president-elect, as in 1915."

Dr. Stalker, Kenosha: Mr. President, I move the adoption of that amendment.

Motion seconded.

DR. D. J. HAYES, Milwaukee: The custom of the American Medical Association to elect a President-elect one year in advance may be a good rule for such a large body, but our Society being so much smaller I do not believe that the best interest of the Wisconsin State Medical Society would be promoted by making this amendment to the Constitution, consequently I think it would be better to leave well enough alone and not make the change.

DR. WILSON CUNNINGHAM, Platteville: I think the way it is at the present time is practical, for instance, our present president is in office, and has control of the society until the end of the present session. The man who is put in for president the following year really does not assume charge until the end of this meeting, and he is then president for next year. If we have a president-elect, it is practically choosing the man for two years hence. Leaving it as it is, the president who is now in charge practically is the president-elect. The one chosen for next year does not assume charge of the society until the end of this session, and he has charge of the society at the next session. I would oppose the amendment.

PRESIDENT: Is there any further discussion? Dr. Keech, Racine: In regard to the election of a president and president-elect, why not, as a compromise, have the president elected for the calendar year. In that event the present presiding officer would serve until January 1st, and then from that time on the new president would begin his duties. That would be a compromise as between the two, the president and president-elect.

PRESIDENT: The matter is before you, gentlemen.

DR. WILSON CUNNINGHAM, Platteville: I second that amendment, if it is made as an amendment

DR. KEECH: I made it as an amendment. PRESIDENT: Is there further discussion? (Calls for the question.)

PRESIDENT: I should like to ask Dr. Sleyster how many of the state societies have adopted the new method, if he knows?

Secretary: I could not tell exactly, but practically all of the societies of our size have adopted

that method. Personally I cannot see any advantage in it for Wisconsin, but at the same time, inasmuch as it is becoming such a general custom among the state societies, and as we are having the new constitution printed and brought up to date, I thought we ought to thresh out this matter and see whether the state society did want to adopt it. It is being very generally done.

President: From the standpoint of one who has just gone down the stream, I want to say that to me the suggestion appealed as a wise one. No man who has not filled this office can have an adequate conception of the innumerable problems that he must face, and what a broad conception he should have of the working machinery in all its ramifications of this state society; and when I read this recommendation it struck me as a wise move and suggestion. I may be mistaken. is possible that I am slow—I think perhaps I am. But I have been in the active work of the society quite constantly, and yet many things arose during the course of the year which I might enumerate to you, which could have been better met by a greater familiarity and the consciousness of an approaching responsibility, which was absolutely out of the question with reference to myself. In a way, like many others, I was drifting, having tried honestly to perform a duty when assigned to me, never reaching over into the other fellow's field, doing my duty, and trying to mind my own business; and it occurred to me that I was not as thoroughly familiar with the working machinery of the state society as I thought. In fact, I felt decidedly weak in a good many places during the past year. And electing a man under this amendment would at least positively notify him that the duty will be fully his this next year. I can see where there are some possible disadvantages, but those disadvantages are equally as great with only one officer, if the man is susceptible to political influence. I agree with Dr. Reineking that if there is any politics in this organization at this time, or has been within the past 8 or 10 years, and possibly 12 years, I have been so obtuse that I have not even sensed it, and we want to keep it out of politics. This is a scientific body, having no politics, no creed, no religion, and having only one goal, and that, the search for truth, and we want to stay on that high plane if we possibly can.

The motion is before the House. Are you ready for the question?

(Proposed amendment read.)

PRESIDENT: Gentlemen, may I just ask for a moment, to express a thought bearing upon this amendment. My understanding of the amendment recommended by the committee revising the constitution is this: that it gives the man who is to take charge of the rudder the succeeding year ample time to formulate his ideas, and to get in touch with the working machinery of the society. It does not have any idea at all of apportioning time; it does not make any difference whether he does that from January to January, or from October to October; it is not a question of dovetailing time, it is giving a man notice and time to get ready, and giving him warning. That is my interpretation of the purpose of that amendment, and I would like to have you bear that in mind when you are voting on this amendment.

DR. H. E. DEARHOLT, Milwaukee: Have we not just adopted an amendment that the fiscal year is to correspond with the calendar year?

PRESIDENT: I think the situation is this, Dr. Dearholt, that that is now being made a matter of constitutional or by-law record; I do not know where it comes in, but we have been operating under such a resolution for a number of years.

DR. H. E. DEARHOLT: The thought I had in mind was this, on the amendment: Is it, to my mind, rather important that the president, or the administration should go from the beginning to the end of a fiscal year. That administration is then responsible for that fiscal year from the beginning to the end, and has a chance to wind up the business of the fiscal year of the association; so I think that the amendment offered of having the term of the administration the same as the fiscal year is a very intelligent one. I personally feel, endorsing the position of the president, that there would be very little danger in selecting a president a year in advance, and I think there would be many advantages. On the other hand, I think that nothing less than the amendment as made should be passed. I am personally inclined to believe that I would rather favor having a president-elect as well, but certainly no less than giving the in-coming president two months to prepare himself, and give him an opportunity to wind up the business of his administration following the close of the annual meeting.

DR. G. WINDESHEIM, Kenosha: Mr. President, originally I was very much opposed to having a president-elect, but, members of the House of Delegates, when you hear a man like Dr. Redelings,

who has been in the work of the society for fourteen years as councilor, and who has seen all the ins and outs of the work of the society as councilor before he was elected president, and then acknowledges that he was at a disadvantage because he did not know more about it, it seems to me that it would be an advantage to have a man trained in the work, probably a whole year in advance of the beginning of his services as president.

The amendment to have the office of president begin the first of January, and run from January to January, I think is a good one, and it may be extended to the president-elect, if the House of Delegates sees fit to select a president-elect. It is very probable that the majority of the men do not know what it means to be president of this society. It is not a society of three or four hundred members at the present time, as it was some years ago, when the society consisted of the members that paid their dues to the annual meeting, and we used to have four hundred, or at the utmost five hundred members in the State Medical Society. It was a different proposition at that time. We now have seventeen hundred members, and there is work going on which has never gone on before, and a good preparation is essential. As I say, when a man like Dr. Redelings, who has been in the work all this time, thinks it is necessary to have better preparation than even he has had, it would stand to reason that the idea of a president-elect is a good one.

Dr. Morgan: It would seem to me, from what little experience I have had in these affairs, that the more time a man has to prepare himself for an object, the more time he will waste in procrastination. If you give a man a year to get ready for this proposition he will waste six or eight or nine months of the year, and will say, I have twelve months to get ready for this mess, and I don't need all of it. If a president is elected according to this amendment, it gives him two months, and he knows he has got something coming to him right soon, and if he has any business about him, he will get busy and be prepared to take upon himself the duties of the office at the time he takes the chair.

PRESIDENT: What do you mean by two months?

DR. MORGAN: He has from the close of this meeting until the first of January before he takes the chair.

PRESIDENT: The question is before you. You vote on the amendment. All in favor of the

amendment as made by Dr. Keech of Racine, will manifest by the usual sign.

Motion carried.

PRESIDENT: The motion prevails. I think that carries with it the original question, and that disposes of the original question. Then we should adopt the motion as amended. All in favor of the motion as amended will signify by the usual sign.

Dr. Wilson Cunningham, Platteville: As a matter of understanding, I think it would be well for us to know what we are voting upon. I for one, do not understand which way we are voting.

PRESIDENT: You realize we just voted on the amendment that you seconded and talked to?

Dr. Cunningham: Yes, sir.

PRESIDENT: That amendment modified a motion, and we now vote on that motion as amended by Dr. Keech, and seconded by yourself.

DR. CUNNINGHAM: That would then eliminate the president-elect, that is the proposed amendment to eliminate a president-elect?

SECRETARY: Yes, and put the president in the first of January.

Dr. H. Reineking, Milwaukee: Then our present president would hold office until the 1st of January, and then the president-elect would come in?

DR. CUNNINGHAM: That is right. DR. REINEKING: If it implies that.

PRESIDENT: The question as amended is before you. All in favor of the motion will manifest by the usual sign.

Motion carried.

PRESIDENT: The motion prevails.

Dr. H. Reineking, Milwaukee: In order to avoid all possibility of trouble, I move that the term of President Redelings be extended until January 1st, 1916.

Motion seconded.

Dr. T. H. Hay, Stevens Point: Under the constitution does not the president hold office until his successor is elected and qualified. I think that covers the ground, and that it is not necessary to burden the record with so much material.

Motion put by Secretary Sleyster and carried.

SECRETARY SLEYSTER: In regard to the new committee on Health and Public Instruction, which has just been created, I should like to hear from Dr. Dearholt. I do not think there is anybody in the society as well prepared to talk on the subject as he is, and I think we ought to have a small committee—a committee that will be active. The

committee should be carefully chosen, possibly appointed by the chair, after giving the matter some thought; and I believe that we ought to start this committee out with a small fund to enable it to do some work. There is no use of appointing a committee if you do not give them something to work with, especially a committee of this character. I think that the House of Delegates should start them out with a certain sum; we might make it small the first year, to get them started, \$200 or \$250, but make this a real committee, which will accomplish things.

PRESIDENT: Dr. Dearholt, have you anything to offer on this matter?

Dr. H. E. Dearholt, Milwaukee: Mr. President and Gentlemen: I feel that there is no work of the association of more importance to the association than is contemplated in what has been the work of these two committees, and will be the work of the joint committee. We have seen our legislation go in a way that is unsatisfactory to us. We have been humiliated when we have gone before the legislature, as a group of class interested individuals, and this is due entirely to the fact that we are misunderstood. This misunderstanding probably dates back to the days of Hippocrates' belief that there was something sacred and secret about medical knowledge, that it must not be imparted to the uninlightened or unprivileged classes.

It seems to me that we have had plenty of evidence, in the sweep of several big public educational movements against disease, to be encouraged to feel that much can be accomplished by public education. It has been a matter of disappointment to me, and I know to the members of the committees, that more has not been accomplished than has been in the past.

I resent, as a physician, the encroachment of the so-called social worker, who comes to medical societies and dictates to doctors what their practice shall be, and tries to instruct them about medicine. On the other hand, as a social worker, I resent the feeling of smug contentment that we see sometimes among men of the medical profession, and the unwillingness to see social workers go ahead when we ourselves are not putting the men in the field to do the work.

I think there ought to be a very active committee, and that that committee should take the business very seriously of identifying the medical profession with the great social movement for the prevention of disease and the prolongation of life, and not allow this field to be covered by insurance actuaries, professors of sociology and social workers generally. I sincerely hope that at this time a real live, working committee will be chosen, and I pledge the funds, as far as proper, of the Anti-Tuberculosis Association, and also of the Extension Division of the University of Wisconsin to the assistance of such a committee.

PRESIDENT: Thank you, Dr. Dearholt. If the work of this organization is broadened, as it necessarily must be, some means must be devised by which to raise money. It has occurred to me a good many times in the past year that opposing organizations are spending money lavishly to bring their ideas and their doctrines and their theories before the people, and we are doing practically nothing. Such a committee should have means at its command. The problem of how this shall be accomplished has been on my mind a good deal during the past year. Some one suggested the advisability of raising the ducs. Personally I would be delighted to pay double the dues that I am paying, or even treble the dues. We would pay it to a golf club or an Elks' club, or some other social organization, and think nothing of it. We need it here for self-protection, and for the elevation of humanity, but we hesitate. I would be very slow to recommend an increase of the dues, because I know the rank and file of the men who are at the outpoints in the state will not understand it. The men who are here at our meetings do not need this meeting nearly so much as the men that we are not reaching. The men here at this meeting are holding up the honor and the prestige of our profession, and are endeavoring to put it on a footing which will bring it recognition, and are sharply differentiated from the class of men who are not doing right, and really do not need the type of treatment which is being brought to bear much of the time at our meetings. The work must go to the outpoints; it must go to the weakling, to sustain him in his faltering steps. And if we do that we must have something with which to pay the worker, because the councilors cannot do it. They have demonstrated that, and the county secretaries tire. They have demonstrated that. If you do not believe me, ask Dr. Sleyster. We must in some way create a fund with which to do work along the lines contemplated by this committee, in and out of the profession.

You were talking of the advisability of this publicity committee, Dr. Sleyster?

Secretary: The committee has been created, Mr. President. This is regarding the funds for it.

PRESIDENT: Is there any further discussion in regard to the proposed fund for this committee?

DR. J. R. CURRENS, Two Rivers: Mr. President, I have had a little experience in this line. I am connected with a tuberculosis sanatorium, which has been handicapped on account of funds, and have been in this work for a good many years. As a member of this society, I have helped lobby some of your medical laws, and I found this: that we have always been hampered for funds. I remember when our first medical law was passed, it was very loosely woven, and public sentiment and the sentiment of the legislature was against it, and we had to fight with these outside sects that tried to creep into the profession, and we have always felt the want of funds. You cannot do work without money. It is hard enough for a man to give his time and lose his practice, and in many cases he cannot afford it.

I move that this society set aside \$300 for the work of this committee for the ensuing year. I believe that it will be one of the greatest steps forward that we have ever made, and I believe that you want to put on that committee some active young men who are ambitious, and will meet these people half way. The irregulars are not slow in raising money. I know that we had a terrible fight with the osteopaths, when they tried to get a State Board of their own. Now, you have two or three other sects trying to crawl in and get the word "Doctor" before their name, and, to the laity, a doctor is a doctor, whether he fits glasses or sharpens razors. Our barbers will soon want the word "Doctor" before their names. I think it would be worse than folly to expect any great results without giving the committee some substantial aid.

PRESIDENT: You make that as a motion, do you, Dr. Currens?

Dr. Currens: I move you that this society set aside \$300 for the work of this committee.

Motion seconded.

Dr. W. F. ZIERATH, Sheboygan: Is there any money to be set aside?

PRESIDENT: I was just going to ask Dr. Hall about that. I think there is. Is there money in the treasury, Dr. Hall?

Dr. S. S. Hall, Ripon: You have the report on the table there. I think the treasurer has money

enough so you can appropriate \$300 for that purpose.

Dr. L. A. Moore, Monroe: If I understood the treasurer's report properly last year, and the secretary's report, if the debts of the society are paid up at the end of the year, the treasury will be completely depleted, and if I was wrong I would like to be enlightened.

PRESIDENT: Is there further discussion? Dr. Hall will give you the data in just a moment.

Dr. S. S. Hall: I presume the gentleman has reference to what Dr. Patek said in regard to the medical defense fund. That is an entirely different fund. The balance on hand at present is \$4,247.34, and the expenses last year, since the last report, were \$3,059.52, which leaves a balance of in the neighborhood of \$800 not expended during the last year.

PRESIDENT: That is a very small margin for a large organization to have, and I think that the suggestion that we are under the necessity of raising money in some way is still before us. I have thought of the advisability of voluntary contributions, and creating a roll of honor of sustaining members, and shall suggest that in my remarks to you this afternoon. It is a matter that should be considered. We surely need money with which to do things.

There is a motion before the house, duly seconded. Are you ready for the question?

(Calls for question.)

PRESIDENT: The question is that the society give this committee \$300 as a working fund.

Motion put and carried.

PRESIDENT: The motion prevails, and it is so recorded.

DR. J. M. Dodd, Ashland: Mr. President, if it is in order, I would like to present the report of the Auditing Committee at this time.

We have examined the books and records of the treasurer, and his report, and find the same to be correct.

PRESIDENT: Thank you, doctor. What will you do with the report of this committee, gentlemen?

DR. J. R. CURRENS, Two Rivers: I move that the report be adopted.

Motion seconded.

Motion put and carried.

PRESIDENT: The motion prevails. Is there any further business to come before this meeting.

If there is no further business to be brought be-

fore the House, a motion to adjourn is in order, and I would suggest that that motion include that we convene at 8:30 tomorrow morning. It will be necessary to convene a little earlier tomorrow, because the scientific session begins at 9 o'clock.

Dr. W. F. ZIERATH, Sheboygan: I move that we adjourn, to meet tomorrow morning at 8:30 in this room.

Motion seconded.

Motion put and carried.

Adjournment to 8:30 A. M., October 7, 1915.

SESSION, THURSDAY, OCTOBER 7th, 1915, 8:30 O'Clock A. M.

Meeting called to order by the President.

PRESIDENT: I presume the first order of business is the roll call.

Roll call by the Secretary.

PRESIDENT: The next order of business is the reading of the minutes of the preceding meeting.

The minutes of the preceding meeting of the House of Delegates were read by the Secretary, and approved.

PRESIDENT: The House is now ready for the consideration of business. There are some committees to report. We have the report of the Committee on Nominations, and the report of the committee who were appointed on this tuberculosis sanitarium matter. Are there any reports?

Dr. G. Windesheim, Kenosha: Mr. President, the first order of business on the second day of the meeting is the report of the Nominating Committee.

PRESIDENT: The committee is not here as yet, and is not ready to report, and if there is any other business we can dispose of, we may as well do so.

Dr. H. Reineking, Milwaukee: Mr. President, does the nominating committee report on place of meeting?

PRESIDENT: I think not.

Dr. WILSON CUNNINGHAM, Platteville: You will find, Mr. President, that that committee will report on the place of meeting.

PRESIDENT: Thank you, doctor. Is there any other business to come before the House of Delegates, so that we may utilize the time?

DR. H. REINEKING, Milwaukee: Mr. President. at the previous meeting of this House of Delegates, I called attention to a clause in the constitution which says that no one shall be elected to an office who is not present at that meeting of the associa-

tion, and, as I said at that time, it seems to me a narrow and unnecessary provision to have in the constitution. I do not know how others feel about it, but it seems to me that it is putting an unnecessary restriction on the choice of the society or upon the choice of the House of Delegates, and while I am aware that this cannot be acted upon at this time, I would offer as an amendment to the constitution that the words in Article 9, Section 3, reading as follows: "who is not in attendance upon that annual session and," be stricken out.

DR. WILSON CUNNINGHAM, Platteville: I think that when we revised the constitution that matter was threshed out pretty thoroughly, and at that time the conclusion was to nominate no one who is not in the habit of attending the meetings. That section of the constitution says he must also have been a member of the society for two years.

DR. H. REINEKING: My motion does not refer to the fact that he must have been a member of the society for two years, it refers simply to that part which makes it necessary that he should be present at that particular meeting.

PRESIDENT: Dr. Reineking, I just want to call your attention to the fact that an offensive clause of that kind can easily be obviated at any time by a motion to suspend anything in the constitution and by-laws conflicting; if an occasion should arise and this society chose to honor someone not in attendance upon the meeting, it could be met in that way. I simply drop this suggestion, and it is up to you to rule what you will do with that resolution. The resolution or motion has not been seconded.

DR. H. B. SEARS, Beaver Dam: I agree with Dr. Reineking in that matter. I think that occasion might arise when the members might wish to honor some one who perhaps might not be able to attend the particular session, and it might be desirable to honor him with an office, and we would be unable to do so. Of course, I presume a motion by the House of Delegates, as you have stated, might obviate the trouble, but I think the suggestion of Dr. Reineking is a very good one.

DR. H. REINEKING, Milwaukee: My object in bringing the matter up was more to get at the sentiment of the members, and with the explanations that have been made, I think it may be just as well to withdraw my motion, and I now withdraw it.

PRESIDENT: I was going to say, that after all the rules and laws that govern this body are con-

trolled absolutely by the wishes of its members, and when this organization resolves to extend the courtesy of the presidency to some one who is not present, it can do so, notwithstanding any little obstruction in the constitution, by a vote of the organization. Am I not right, Dr. Dearholt?

Dr. H. E. Dearholt, Milwaukee: This situation arose at one time in the history of the society, a number of years ago, when there was a desire to elect a man who was one of the most loval supporters that the society had, and at that time this question was brought up, a friend went to the telegraph office and wired this man to come. I do not think they even told him why he was wanted. But he was obliged to come to that meeting, and he did, and that removed the objection. But it has always seemed to me that it was rather a silly little provision, because I feel with Dr. Reineking, that as to any man we are likely to elevate to the presidency of this society, we will have reasons infinitely greater than the mere fact that he is present at a particular meeting. If that is the only endorsement a man has for the presidency of this society, he ought not to be elected.

Dr. H. Reineking: Furthermore, this restriction does not refer to the presidency alone; according to this provision in the constitution, it refers to any office, and you cannot elect any one to any office, councilor or any other office, if he is not present at this meeting.

SECRETARY: While we are on this subject, I might say that I made a thorough study of the constitution this summer and took the matter up with practically all of the other states. I wrote for their constitutions and the changes they have made in them.

The original constitution of the State Medical Society was published in 1903, and was an outline prepared by the American Medical Association and sent to the different states, in an attempt to get these constitutions and organizations developed as uniformly as possible. The original constitution was given a great deal of thought and a great deal of study by the officers of the American Medical Association. I find this same provision in the constitutions in all of the other states. I myself do not see that it is very important to us. At the same time, there is something in keeping the different state constitutions as uniform as it is possible to keep them, and I rather suspect that the officers of the American Medical Association felt

rather strongly on the point, or they would not have put that provision in there.

DR. S. S. HALL, Ripon: Mr. President, is there a motion on this?

PRESIDENT: I think there is no motion.

DR. G. WINDESHEIM, Kenosha: Mr. President, the question which is up at the present time, I believe is one of importance. While we are now revising the constitution, and having new copies printed and distributed, if there are any changes contemplated, they should be made now. In order to make the change, the amendment will have to be presented in writing, and read to the House of Delegates, and then acted upon to-morrow morning. If, after the expression of opinion of the members here, they think that such an amendment would be advisable, let them present it in writing, and then act on it to-morrow morning, as to whether it will be accepted then or not.

PRESIDENT: We will leave that open, if there is no further discussion. I will ask for the report of the Nominating Committee.

The report of the Nominating Committee was presented by the Chairman as follows:

The Nominating Committee recommend the following names:

For President, L. F. Jermain, Milwaukee.

1st Vice-President, M. R. Wilkinson, Oconomowoc.

2nd Vice-President, M. S. Hosmer, Ashland.

3rd Vice-President, R. W. Blumenthal, Milwaukec.

Delegate to the A. M. A., T. H. Hay, Stevens Point.

Alternate, Rock Sleyster, Waupun.

Committee on Medical Education renominated, L. F. Jermain, Milwaukee; J. Van De Erve, Milwaukee, and C. R. Bardeen, Madison.

Delegate to National Legislative Council A. M. A., G. Windesheim, Kenosha,

Delegate to Council on Medical Education, A. M. A., A. J. Patek, Milwaukee.

Committee on Medical Defense renominated, G. E. Seaman, Milwaukee; A. J. Patek, Milwaukee, and S. S. Hall, Ripon.

Committee on Health and Public Instruction, Edward Evans, La Crosse; W. F. Zierath, Sheboygan, and J. M. Beffel, Milwaukee.

Committee on Public Policy and Legislation renominated, J. P. McMahon, Milwaukee, Chairman; A. G. Sullivan, Madison, Secretary; G. H. Fellman, Milwaukee, J. J. McGovern, Milwaukee, S. G. Higgins, Milwaukee, P. F. Rogers, Milwaukee, A. F. Lovenhart, Madison, Chas. S. Sheldon, Madison.

Madison recommended by the Committe as the next meeting place, on the invitation of Drs. Head and Gilbert.

Recommendation that the next president send 12 names to the Governor, from which he can select the medical examiners.

Dr. J. R. Currens, Two Rivers: I move the adoption of the report.

Motion seconded.

Motion put and carried.

PRESIDENT: The motion prevails, and Dr. Jermain is the prospective President. He is not here. What further business is there to come before the House of Delegates? Are there any other committees to report? If not, a motion to adjourn is in order.

DR. W. F. ZIERATH, Sheboygan: Does the adoption of this report which has just been read elect the officers?

PRESIDENT: That elects the officers, I think.

Dr. E. H. Townsend, New Lisbon: It goes before the Convention, and they of course will not turn down the recommendation.

SECRETARY: No, the House of Delegates elects the officers, I think. Dr. Windesheim, should there be a vote taken on this, besides the adoption of the report?

Dr. WINDESHEIM, Kenosha: The adoption of the report makes it the action of the House of Delegates.

PRESIDENT: That is my understanding. It was my thought that the nominations should be confirmed by the general session, but on looking the matter up last night I found that was not required.

Dr. Townsend: It was done some years ago. Dr. S. S. Hall. Ripon: Not recently, not since the reorganization.

PRESIDENT: It has not been done recently.

Dr. J. R. Currens, Two Rivers: I would suggest that we bring our President before the House of delegates.

PRESIDENT: If he is available. We have not much time, and I am very anxious to get started at the regular session of the Society. We have more than we can take care of this morning.

Dr. S. S. Hall, Ripon: The place to bring him in is at the general session.

PRESIDENT: Let us do that to-morrow.

Secretary: Dr. Hall has a letter from Dr. Sheldon, which informs us that Dr. Sheldon is laid up at home with an infected ear, and will probably be unable to attend the session this year.

Dr. Hall: He says that he may come in this morning.

SECRETARY: He has word that he may be here this morning, but in case that he does not come I think it would be a nice token of respect if the House of Delegates would send him a telegram telling him how sorry they are that he could not be here, and how much he is missed.

PRESIDENT: It is an easy matter to get that before the House of Delegates by a motion to appoint a committee, and if the Doctor does not appear, that committee ean not in behalf of the House of Delegates.

Dr. W. F. ZIERATH, Sheboygan: Mr. President, I move that the Secretary be instructed to send a telegram to that effect to Dr. Sheldon if he does not appear.

Motion seconded.

Motion put and earried.

PRESIDENT: The motion prevails, and Dr. Sleyster is so instructed.

DR. L. A. MOORE, Monroe: Mr. President, there is one matter I would like to bring up. The councilor from our district spoke to me about it before he went home, and I guess he also spoke to the Secretary concerning the same matter.

In the district meetings there is sometimes a little extra expense incurred, and he thought in his talk with some of the other councilors that that extra expense incurred in these district meetings should be paid for by the state society instead of by the eounty society or trying to pro-rate it among the county societies, because these district meetings are usually held on the invitation of one county to the other counties, and there was an understanding of that kind before this district meeting was held in our district, and one of the men incurred a great deal more expense than the advertising of the affair, and a good many of us thought was necessary, and as a result there is a deficit, I believe, in that district, of about \$10 or \$15.

SECRETARY: \$16.

Dr. Moore: \$16, and he thought that on account of its relation to the state meeting, and the benefit that those meetings were to the state society, that it was no more than right that the state society should stand this extra expense, in-

stead of trying to collect it from the different counties, because in our meeting I know there were two counties that were very slimly represented at the meeting, and got very little benefit from it, although the other counties got great benefit and enjoyed the meeting very much. It was a lively meeting, and the secretary was there, and will vouch for that part of my remarks. To get this matter before the House of Delegates I would make a motion to the effect that the state society stand whatever little necessary expense there is connected with these Association meetings.

Dr. Wilson Cunningham, Platteville: Mr. President, I move we adjourn.

Motion seconded.

Motion put and carried.

Dr. Reineking: To what hour?

President: 8 o'clock to-morrow morning.

Let me say this to Dr. Moore, take this message back to your district: what a misfortune it would be to take the pleasure of defraying the expense of a district meeting out of your district. What a disappointment it would be to your district. I want to say this, that when there is a little deficit up in our district, there are half a dozen fellows to whom I can go and say, here, we need so much money, and they will say, here it is, that quick, get busy in your district.

Adjournment to Friday, Oct. 8, 1915, 8 o'eloek A. M.

# SESSION, FRIDAY, OCTOBER 8, 1915, 8 O'Clock A. M.

Meeting called to order by the President.

PRESIDENT: The first order of business will be the reading of the minutes of the last meeting.

Minutes of preceding meeting read and approved.

PRESIDENT: The accepting of the report of the Nominating Committee virtually accepts Madison as the next place of meeting.

Are there any reports from committees? There are some committees that have not reported.

Mr. Secretary, is there anything on the Secretary's table?

SECRETARY: I do not think there is, Mr. President. I should like to ask an expression from the House on the Hand Book that was published this year; there was a cost of \$26 connected with the publishing of this hand book, and we might have an expression from the House of Delegates as to whether they want that done next year or not.

Dr. L. M. Warfield, Milwaukee: If a motion is necessary, I would like to move that the Secretary be authorized to publish each year the reports of the various committees, to be placed in the hands of the delegates before the meeting. I think this is a splendid thing. It certainly gave us all an idea of what the reports would be, and it might have facilitated matters even more had we not read these reports before the House of Delegates, but accepted them without reading. And I think that at the meeting next year, when these reports are published in this book form that we might save time by having them read by title, and accepted as printed.

PRESIDENT: I should like to suggest as an addition to your question, Doctor, that a little more time be given to the delegates to read that booklet. I think we received it just about a week before the meeting, and some men who were busy found it very difficult to read that booklet and do other things that were on the slate before leaving for the meeting. That was my personal experience. In fact the long ride afforded the only chance I had to read it through.

SECRETARY: I would like to say in that connection, that I wrote to every chairman of every committee six weeks in advance of the meeting. I will say this for Dr. McMahon, with the lengthy reports that he had, two or three of them, he was the only committee chairman that got them to me in time.

Dr. W. F. Zierath, Sheboygan: Mr. President, I think that is a good thing, but our experience was that the booklet came out, and a couple of weeks later the Journal came out with the self-same thing in it.

Secretary: No, it did not, Doctor; the Journal came out with the report of last year's session; that was nearly a year old.

Dr. Thomas H. Hay, Stevens Point: Mr. President, while you are speaking of reports, I should like to hand in a report which should have been printed in the booklet but was not: perhaps the secretary can explain why.

Dr. L. M. Warfield: I call for a point of order. There has been no second to this motion.

Motion seconded.

PRESIDENT: It has been moved and seconded that this booklet be published for the convenience of the members of the House of Delegates, and that it be published early. All in favor manifest by the usual sign.

Motion carried.

President: The motion prevails.

DR. THOMAS H. HAY, Stevens Point: I should like to present that report and have it off my mind.

PRESIDENT: Is that the report of the committee which you are on?

DR. HAY: Yes, this is a committee report, and I was unable to get any of the members of the committee together until yesterday. There were just two of us here, and I felt that we ought to make the report on a certain matter that was brought up at the last session.

This is the report of the Committee on the Prevention of Tuberculosis.

Your committee begs to make the following brief report on the tuberculosis problem as it exists in the state at this time:

A law was enacted authorizing two or more counties to join in the establishing of a tuber-culosis sanatorium, carrying out an enlargement, so to speak, of the original law authorizing counties to construct and maintain tuberculosis sanatoria; and at the same time this law increased the state aid from \$3 per week per capita to \$5 per week per capita.

Arrangements have also been made whereby counties not having sanatoria may send patients to other counties which maintain sanatoria, and which may have beds unoccupied.

Second, the State Camp at Tomahawk for convalescents has been completed, and there are at present 20 or more patients taking advantage of the privileges afforded thereby.

The good work of the Wisconsin Anti-Tuberculosis Association has been continued, and much has been accomplished in the establishment of county sanatoria and in the dissemination of useful knowledge among the general public.

Milwaukee County has just completed the construction of the new sanatorium, Muirdale, with present accommodations for 250 patients, with a plan providing an ultimate capacity of 500 patients. This will be opened for the reception of patients in about a month.

The legislature of 1915 has continued reasonable appropriation for the State Sanatorium at Wales, which goes to show that the Anti-Tuberculosis movement is progressing favorably in the state, with the statistical result that the death rate from tuberculosis has been reduced by one death in every 68 hours.

At the 11th hour the Committee on Public Policy and Legislation referred to this Committee alleged charges against the medical management of the state sanatorium at Wales. Our information is that the matter contained in these alleged charges has for the most part been furnished to the State Board of Control. In our judgment, any charges against the medical management of any state institution should be filed with the State Board of Control and do not fall within the province of this Committee for initial investigation and action.

All of which is respectfully submitted by the Committee for the Prevention of Tuberculosis.

Dr. H. E. Dearholt, Milwaukee: Mr. Chairman, if I understood the report correctly, it stated that state aid to the county sanatoria was increased from \$3 to \$5 by the last legislature. I should like to have that corrected in the record, because that change was made two years ago.

DR. HAY: Dr. Harper and I went over that matter, and we were not quite sure on that proposition, although he was convinced there was a change this year, but was not sure of the amount. But we decided at the time that it would probably be corrected if it were incorrect, and, since we were working under pressure, we included it in the report.

PRESIDENT: The reporter will correct that.

Dr. L. M. Warfield, Milwaukee: I move that the report be accepted, with that correction.

Motion seconded.

Motion put and carried.

PRESIDENT: Is there further business to come before the House of Delegates?

Dr. E. E. Axtell, Marinette: If it is in order, I wish to follow the suggestion of Dr. McMahon and move to accept the report of the committee.

Motion seconded.

PRESIDENT: It has been moved and seconded that the report of the Committee on Public Policy and Legislation be accepted.

DR. W. F. ZIERATH. Sheboygan: Is that not a little bit irregular? Is it not necessary to take that report from the table, and then take with it the report of the committee that was appointed to investigate this report.

PRESIDENT: I think that the accepting of the report of the committee takes it off the table automatically.

DR. WILSON CUNNINGHAM, Platteville: In order to overcome that objection I make the motion

that we accept the report as corrected by the committee.

PRESIDENT: Doctor, you are juggling your motions, and it is hard for the Chair to rule. It would be necessary for your second to come in, Doctor. Restate your motion. We cannot follow you.

The motion before you now, and seconded, is that we accept the report of the Committee on Public Policy and Legislation, as corrected by the Committee.

DR. E. E. AXTELL, Marinette: The original motion did not include the words "as corrected".

Dr. H. E. Dearholt, Milwankee: No, that is what we have been fighting over.

PRESIDENT: Dr. Axtell's motion is before the House, with the second, and has not been acted upon.

Dr. T. H. Hay, Stevens Point: The whole question seems to be whether we have proceeded in accordance with parliamentary law in properly taking the report as laid upon the table and bringing it before the House of Delegates again. And I understand, that it is within the province of the Chair to take the report from the table and present it to the House of Delegates for their consideration. That having been done, it seems to me that the motion to accept the report is in order, and that it having been seconded we do not need to discuss fine points any further, or split any more hairs.

PRESIDENT: That is my attitude, and Dr. Axtell's motion is before the House.

Motion seconded.

Dr. J. P. McMahon, Milwaukee: I did not suggest to the House of Delegates that they accept the report. I would not think of making such a suggestion. In fact it is immaterial to me personally whether the report is accepted or rejected. There are, however, important principles involved. Dr. Axtell misunderstood me. I did suggest that the house of Delegates either accept or reject the report for reasons previously and, I believe, sufficiently comprehensively stated.

PRESIDENT: That is just what we are about to do, Doctor.

Dr. E. E. Axtell, Marinette: About to accept or reject your report.

PRESIDENT: Are you ready for the question? (Calls for the question.)

Motion put and carried.

DR. E. E. AXTELL, Marinette: Is the meeting

open for general business, or are we under committee reports?

PRESIDENT: The meeting is open for general business. I think there are no further committees to report.

Dr. E. E. Axetll, Marinette: Mr. President, I have the matter to lay before the House of Delegates. I was instructed by the Marinette County Society to bring before the House of Delegates a matter of which you are all thinking, and which concerns all of us, and to be brief I will put it in the form of a motion, which will explain itself:

Whereas, there is on the statute books a law regulating malpractice, and limiting the time under which civil actions and suits can be brought for malpractice to two years; and

Whereas, there have been malpractice suits—practically malpractice suits, but not under that name—brought under another statute, a statute for breach of contract I believe is the name, which extends the time to six years, and practically extends the time for bringing malpractice suits to six years;

I make the motion that the proper persons, the Legislative Committee or those properly concerned in this matter in the Society be instructed to bring it before the Legislature, and to propose and try to have passed a law which shall limit the time under which suits can be brought for malpraetice, to two years, as originally contemplated by the law.

Dr. W. F. ZIERATH, Sheboygan: I second the motion.

PRESIDENT: It has been moved and seconded that the proper committee, or the Committee on Public Policy and Legislation, endeavor to obtain a law to limit the doctors' liability for malpractice, to two years, modifying the common law so that it shall not be possible to construe it to include malpractice under the caption of breach of contract.

DR. WILSON CUNNINGHAM, Platteville: I think, unless the law has been changed very recently, that it is at the present time limited to one year.

PRESIDENT: My dear doctor, you are not informed, because our boys are being attacked. I think there are now two suits in our courts, one in our own community, and one in the western part of the state, for breach of contract, implied contract, just the ordinary contract that occurs between the doctor and the patient, where there is an interview in the office, and the doctor serves his patient.

(Calls for the question.) Motion put and carried.

PRESIDENT: The motion prevails. I really wish that the committee would seriously take that into consideration, and see what can be done to get a law protecting the doctor, if it is possible, to the two year limit, and that the malpractice feature shall not be opened up under the pretext of a breach of contract.

Is there any further business to come before the House of Delegates?

Dr. W. F. Zierath, Sheboygan: Mr. President, at the meeting of the Association of County Secretaries yesterday, I was instructed to bring before this House of Delegates the subject of making county secretaries ex officio members of the House of Delegates. This is a pet scheme of Dr. Sheldon's, and I have merely been asked to bring it before the House. It would necessitate, I believe, an amendment to the constitution, and as such constitutional amendment must be read at a preceding meeting, I hardly see how we can take it up at this time. I am just fulfilling my duty in bringing it before the House of Delegates for any discussion that may be required.

PRESIDENT: What is your pleasure, Gentlemen? That matter has been up before the House of Delegates a good many times, and personally I had regarded it as an unwritten law. But if you wish to make it a matter of constitutional law, the subject is before you now.

DR. S. S. HALL, Ripon: Has the proposition been seconded?

DR. W. F. ZIERATH, Sheboygan: I made no motion.

PRESIDENT: There is no motion, it is a suggestion.

DR. S. S. HALL, Ripon: Forget it.

PRESIDENT: I would say, bring in your county secretaries—do not forget it, but bring in your county secretaries. The best thing that can happen is to have your county secretaries present in this House of Delegates, and become inoculated with the spirit of the working machinery of this organization. It will increase their interest and their usefulness. And the invitation extended to them to join us, in the same capacity that this resolution contemplates, is all that is needed, and if you take this matter in hand and prepare it for the next meeting, it would be desirable to have it in the new constitution.

Is there any further business?

Dr. W. F. Zierath, Sheboygan: One more thing, Mr. President. At some previous meeting of the House of Delegates a committee was appointed to draw up a model fee schedule for the state Workmen's compensation measure. I do not know what became of that resolution, or what was done, but inasmuch as the last legislature passed an amendment to the Workmen's Compensation Law enabling the committee to pass upon the reasonableness or unreasonableness of physicians' fecs, it seems to me that it is very important that some fee schedule or guide be given to the commission that will have the approval of the medical men of the state of Wisconsin; a fee schedule that is established by the Commission will be taken as a criterion by which to change the fees of physicians all over the state, and it seems to me that it is very important that these fees have some sort of sanction of the State Medical Society.

Dr. Seaman, I believe, was a member of that old committee, and I would like to know if anything was ever done?

DR. H. E. DEARHOLT, Milwaukee: I heard the discussion on that informally, and they said the practice in the past year had shown there was no occasion for action or direction of the Society. That was a conversation with Dr. Seaman and Dr. Jermain, who are members, with Mr. Crownhart.

I move that we adjourn.

DR. J. P. McMahon, Milwaukee: May I ask permission to introduce a resolution before we adjourn? This resolution which I wish to present to the House of Delegates touches upon the work of the Psychiatric Institute and the work being done by Dr. Lorenz at Mendota.

Resolved, by the House of Delegates of the State Medical Society of Wisconsin, that appreciation of the work reported by Dr. Lorenz be expressed and that a vote of thanks be extended to those public and private agencies whose co-operation made it possible to procure these results, which make it easier for the medical profession to serve the public.

I move the adoption of this resolution.

Dr. L. M. Warfield, Milwaukee: May I add that the secretary be instructed to send copies of the resolution to the Board of Control and to the members of the visiting committee of the legislature?

PRESIDENT: You include that modification?

Dr. L. M. Warfield, Milwaukee: I do in seconding it.

Motion put and carried.

On motion duly seconded and carried, the House of Delegates adjourned.

DIGEST REPORT OF PROCEEDINGS OF THE SIXTY-NINTH ANNUAL MEETING OF THE STATE MEDICAL SOCIETY OF WISCONSIN HELD AT THE HOTEL WISCONSIN, MILWAUKEE, WIS-CONSIN, OCTOBER 6TH, 7TH AND 8TH, 1915.

Meeting called to order by the President, Dr. Theodore J. Redelings, Marinette, at 11:30 A. M., Wednesday, Oct. 6th, 1915.

The Invocation was by the Rev. Walter F. Greenman, Milwaukee.

The Address of Welcome was given by Dr. G. A. Bading, Mayor of Milwaukee, in which he expressed his pleasure as a medical man and as Mayor in welcoming the Society to Milwaukee, and voiced his approval of the proposed public meeting to discuss the subject of cancer. Advocated a like step in regard to venercal discases, as a means of educating the public and thereby checking the ravages of such diseases.

The response to the Address of Welcome on behalf of the State Medical Society was made by Dr. H. W. Morgenroth, Oshkosh, thanking the Mayor for the courtesies extended, and expressing the hope of future progress along medical lines.

Dr. R. W. Blumenthal, Milwaukee, presented the report of the Committee on Arrangements, outlining the proposed arrangements for entertainment of the delegates during the stay in Milwaukee.

The report of the Program Committee was presented by Dr. Chester M. Eehols, Milwaukee, in which he laid emphasis on the public meeting for the discussion of the eancer problem, and called attention to the smaller number of papers on the program as arranged to allow time for discussion.

On motion duly carried the courtesics of the Convention and privilege of the floor were extended to Dr. D. O. Willis, Louisiana, Member of the American Medical Association.

An adjournment was taken until 2 P. M., Oct. 6th, 1915.

AFTERNOON SESSION, OCTOBER 6TH, 1915, 2 P. M.

Meeting called to order by the Vicc-President, Dr. Hoyt E. Dearholt, of Milwaukee.

The Annual Address of the President was presented by Dr. Theodore J. Redelings, Marinette.

An address on "Comments on Recent Medical Legislation" was presented by Dr. Philip F. Rogers, of Milwaukee (see Journal, October, 1915).

Dr. T. L. Harrington in discussion stated, in reference to the examinations under the Eugenics Law that he had made such examinations without feeling the necessity of swallowing any scruples.

Dr. Pelton gave it as his opinion that in order to sigr

the certificate it was necessary to swallow the scruples, and stated that he had not signed such certificates until the amendment in the last legislature.

Dr. J. J. McGovern, Milwaukee, in discussion stated that medical legislation was not what the profession of Wisconsin expected from the last legislature, and while a few points had been gained, a great deal of valuable ground had been lost. He stated that if the medical profession wished to wield proper influence at Madison each must take an active interest in selection and election of members of the legislature. That the committee of the Society was not a unit in action, and that two of the Madison members appeared to show more active interest in two bills directed against the Medical Department of the State University than in legislation favored or opposed by the other members of the Committee; that it is unfortunate the activities of the Madison physicians referred to were such as to strengthen the distrust of those skeptical of the altruism of the medical profession, thus hampering the influence of the medical profession in legislation for public welfare.

Dr. L. R. Head, Madison, in reply to Dr. McGovern, set forth the justification of the Dane Co. Medical Society in their attitude in reference to legislative matters and the University Clinique, and expressed his desire that the medical men of Madison adjust these matters with the University Medical Department.

Dr. G. E. Seaman, Milwaukee, expressed the opinion that the recent medical legislation faired so badly in the legislature owing to the controversy that had arisen over legislation respecting the University Medical Department.

Dr. C. R. Bardeen, Madison, expressed the hope that the suggestion of Dr. Head to have the Dane Co. Society and University medical men get together on the proposition would be followed out, in the interest of a united profession, for the good of the profession and the public.

The "Symposium on Accident Surgery and Workmen's Compensation" was taken up, and Dr. A. B. Rosenberry, of Wausau, presented a paper on "The Indemnity Companies' Point of View," covering the following:

Scope of the law.

Definition of accidents.

Bearing of pre-existing disease on compensation.

Examination of applicants for employment.

Causes of high cost of Medical and Surgical aid.

Jurisdiction of Industrial Commission in disputed cases.

Experience under Compensation Acts in other States (see Journal, December, 1915).

He stated that the cost of medical and surgical aid has been a disturbing factor in the solution of the problem thrust upon the employer by the Workmen's Compensation Act, and gave a review as to the authority of commissions of different states to pass upon medical and surgical aid bills, to protect employers and insurance companies from excessive charges under the Workmen's Compensation Act. Numerous or unnecessary treatments and dressings, the reason for excessive charges. The Insurance Company has no quarrel with

any fee bill of the Wisconsin State Medical Society. Differences almost exclusively confined to unnecessary and prolonged treatment. High class service always best for the injured, and most economical for the Company.

The Hon. Chas. H. Crownhart, Retiring Chairman of the Wisconsin Industrial Commission delivered a paper on "The Relation of the Medical Profession to Workmen's Compensation" covering the following phases:

## The Legal Phases:

Relation to employers.
Relation to workmen.
Evidence at hearings.
Reports to employer or insurer.
Reports to commission.
Relation to lawyers.

## Professional Ethics:

Employer's acceptance of family physician. Family physician's relation to employer's physician.

## Malingering:

Duty of the physician to patient. Duty to employer.

## Malpractice:

Commission's duty to patient — to doctors — to employer.

## Contracts of Employment:

Schedule of fees.

Acceptance of yearly salary.

Acceptance of percentage contract.

Combination physician and hospital contracts.

Relation between physicians and industrial commission (see Journal, December, 1915).

The Workmen's Compensation Law has been a great success. The right of employer to select the physician essential to the success of the act, but otherwise are sources of contention which doctors can do much to allay. Physicians should accept the principles of the law and carry out its provisions. The kind of treatment he is to receive is the province of the law and of the doctor. No expert service is to be tolerated in compensation cases. Under the compensation act physician required to testify when ordered by the commission.

He advocated simple language in testimony before the commission.

The physician must in large measure solve the problems of malingering. The Industrial Commission has had very great help from the medical profession.

The ideal contract is the implied contract of quantum meruit reserving the selection in each case from as large a circle of qualified physicians as possible.

The Commission desires the active assistance of the medical profession at all times.

Dr. A. Hamilton Levings, Milwaukee, read a paper on "Hernia ond Orchitis in Relation to Accident and Compensation," covering the following:

A Description of Hernia.

Definition of Traumatic Hernia (see Journal, December, 1915).

Acute inflammation of the epididymis and testicle may be due to specific infection, the use of instruments, infections, disease and trauma.

Orchitis in children is principally due to infectious diseases and is acute. In adults it is often due to syphilis and is chronic.

Dr. Levings gave it as his conclusion that a hernia is a protrusion of some viscus from its natural cavity, through an opening in the parietes, and consists of a sac, sac contents, and, generally, coverings; that a protrusion never having occurred the person has not a hernia, although he has inguinal and femoral rings, and may have a preformed sac.

That a hernia to be classed as one of effort, or due to traumatism, must occur for the first time during unusual effort or traumatism, and that it be small, tense, painful and disabling—in other words, strangulated; that the patient be seen by a physician within a few hours, and that he testify to such conditions, that the peritoneum is distensible, elastic, and in the hernial regions only loosely connected to the pelvic fascia, and that sudden, unexpected and great increase in the intraabdominal pressure can tear the peritoneum about the internal ring or force a portion as a sac into a ring, producing a traumatic hernia.

Orchitis may be traumatic in origin. Acute inflammation of the cpididymis and testicle may be due to specific infection, the use of instruments in infectious diseases and trauma.

The great majority of cases of so-called acute orchitis are really inflammations of the epididymis due to gonorrheal infection. The principal requisite is to distinguish traumatic orchitis from acute epididymitis, the result of posterior urethritis.

Dr. Edward Quick, Milwaukee, read a paper on "Border Line Cases under Workmen's Compensation Act," covering the following:

- A. Definition of Terms:
  - 1. Personal Injury.
  - 2. Accident.
  - 3. "Accidentally Sustained."
  - 4. Proximate Cause.
  - 5. External Violence.
  - 6. Trauma.

## B. Legal Difficulties and Medical or Scientific Difficulties:

Tuberculosis of Lungs, Bones and Joints following accidents; Nephritis, Peripheral Neuritis; Aberrant Emboli; Hernia; "Traumatic Bubo"; Malignant Tumors.

C. Case Histories (see Journal, December, 1915).

Definitions of the term "Accident" by the Wisconsin Railroad Commission and the Supreme Court of Pennsylvania.

Legal meaning of the term not always what is meant in pathology or surgery definitions.

A résumé of cases of accidental injury followed by tuberculosis of the injured part. The relationship between injury and tuberculosis has been a subject of much controversy in Germany since the passage of the workmen's compensation law in 1884.

Much experimental evidence in the literature that micro-organisms introduced into the blood stream frequently localize and set up a destructive process in any traumatized bone, joint or soft part. Bone particularly predisposed to localized bacteria.

Dr. C. H. Lemon, of Milwaukee, in discussion said in part. One thing that seems to be settled by compensation commissions is that there is no such thing as traumatic hernia, as ordinarily understood. In traumatic hernia a laceration of the peritoneum must be looked for instead of the sac. The difficulty in solving the question is that cases do not come to operation early enough.

Dr. W. F. Zierath, Sheboygan, discussed the 90 day limitation as to the care of patients under the workmen's compensation law, and suggested strengthening the compensation act by eliminating the 90 day clause, establishing a fee bill, and having the state take over the insurance feature.

Dr. V. A. Mason, Marshfield, in discussion said in part: Doctors should urge the commission to set a proper fee. Fees should be higher in some cases. If the fee bill is to be set, it should be fixed by the Industrial Commission of the state, and not by the insurance companies.

Dr. M. D. Bird, Marinette, in discussion, said in part: It might be a good plan to have the powers of the Industrial Commission enlarged, or new powers granted, to include the settlement of differences between the doctor and patient in regard to malpractice. In relation to the 90 day limitation, it might be a good plan to have the doctor automatically discharged when the responsibility of the liability company ceases at the expiration of the 90 days. The time is not far distant when the state will take over many of the features now carried by the insurance companies, and the practice of medicine taken over by the state, as in England.

Dr. J. P. Connell, Fond du Lae, in discussion, suggested that the Commission should not pass on surgical work, but should have one or two competent physicians either as consultants, or members of the Commission, to get opinions on surgical matters.

Dr. J. R. Currens, Two Rivers, in discussion stated, that the limitation in Michigan was three weeks, indicating that Wisconsin was better than some of the other states in regard to the limitation. Physicians should get together on the free proposition, and the county societies appoint a committee to formulate a basis for reasonable fees. Men doing business on a commission basis hurt the profession.

Dr. A. J. Caffrey, Milwaukee, stated that in doing minor surgical work, where the minimum fee bill is \$5 for the ordinary case, and \$25 for an extreme case, the insurance companies and employers object to the bill even though that is the minimum charge. Either the doctor who gets in on a case should notify the attending

physician, and thus avoid friction, or the state take charge of the insurance feature.

MORNING SESSION, OCTOBER 7, 1915, 9:20 A. M.

Meeting called to order by the President.

Dr. D. R. Connell, Beloit, read a paper on "Some Acute Abdominal Emergencies," covering cases such as ruptured extra uterine pregnancy, acute bleeding ulcer of the stomach and duodenum, or rupture of these organs. A plea for an early and accurate diagnosis with the proper treatment.

Practically all the acute diseases are first seen by the family doctor, and on his shoulders rests the early diagnosis and treatment, medical or surgical, as the case may be.

Dr. L. F. Jermain, Milwaukce, in discussion said in part:

The acute abdominal conditions discussed by the essayist, with the possible exception of hemorrhage from the stomach, are no longer considered medical, or even border line affections, but are distinctly and solely surgical, and no treatment except prompt surgical treatment is warranted in any of them. No physician should prescribe morphine or any other palliative in these conditions, before obtaining the consent to surgical interference.

Dr. J. P. Connell, Fond du Lac, in discussion said: Abdominal pain is a warning to the individual and to the physician that there is impending trouble, and the location of the pain indicates to the physician its significance. Pain is the danger signal. Morphine or other parcotics should not be administered until after diagnosis made and treatment outlined. A series of 5 cases with a mortality of 60 per cent, where, with proper diagnosis, there should have been a hundred per cent, of recoveries.

Dr. D. J. Hayes, Milwaukee, in discussion said in part: The physician must have the backbone to refuse morphine or other narcotics and insist on the securing of a competent surgeon at once. Accurate diagnosis of extreme importance.

Dr. W. E. Ground, Superior, in discussion stated: The giving of physics in cases of abdominal trouble is a dreadful mistake, and worse practice than giving morphine.

Dr. M. R. Wilkinson, Oconomowoc, delivered a paper on "Non-Diabetic Acetonaemia," covering the following:

This paper is to deal with its relative frequency and the meager literature upon the subject.

The particular form dealt with is the so-called acidosis, recurrent or cyclic vomiting of childhood.

The varying and incomplete symptomatology including complications.

Citation of cases.

Theories as to etiology.

Unanimity of opinion as to treatment.

The disease occurs most frequently between the second and eighth years, and attacks both sexes, but most frequently females. Apparently is not from dietetic error. Alkaline treatment indicated to overcome poisonous effects of acids, tenth grain doses of calomel, and symptomatic treatment as the individual case requires. Diet should consist chiefly of water and easily digested carbohydrates.

Dr. H. A. Peters, Oconomowoc, in discussion said in part: The time is still ripe for further investigation, and eventually medical men will be satisfied that it is more a condition arising from a loss of equilibrium of the various duetless glands which are directly influenced by the nervous system.

Through acetone poisoning of the blood the alkalinity is reduced, and to supply the alkali from a different source bycarbonate of soda per mouth, and even intravenously, or per rectum, is indicated.

Dr. E. V. Brumbaugh, Milwaukee, stated that in a series of twelve or thirteen hundred urine examinations of patients before operative procedure, acetone was present in three or four instances, but in examinations following operation, acetone was present in more than one hundred cases. Marked relationship between the toxic symptoms following operation. Where vomiting was slight, and easy recovery had from the anesthetic acetone was found in a small number of cases; where severe vomiting was present, acetonaemia was evidenced by the presence of acetone bodies in the urine in 75 per cent. These findings tend to corroborate the Van Noorden theory.

Dr. Layton, Fond du Lac, in the discussion said: Vaughn, Sellers and Crile have shown that protein metabolism has undoubtedly a very important bearing upon these cases. My own experience, and literature on the subject, indicates that these cases are practically always due to some dietetic error in the infant. Protein metabolism is one of the most important factors of growth. Derangement of the internal secretions are an important factor.

Dr. M. R. Wilkinson, Oconomowoc, in closing, emphasized the fact that street Arabs whose diet is in no way regulated, are never attacked. Physicians do not give sufficient carbohydrates. Starving the system of carbohydrates produces acetonaemia and endangers the life of a patient who is undergoing an operation for acute trouble.

Dr. H. P. Greeley, Waukesha, read a paper on "Focal Infections and Their Relation to Diabetes." He said in part: With many people the subject of focal infection has become a fad. Clinical relation between focal infections and diabetes.

He gave the results of a clinical study of 600 cases. Focal infections being extraordinarily common, if responsible for diabetic condition, the disease would be vastly more frequent. It has been shown that 16 per cent. of normal people may develop glucosuria under stress of great emotion. The increasing desire for excitement in youth is a source of the greatest harm in causing disorders of the nervous system, and of metabolism, and is a subject which is most fertile and will vastly increase the knowledge of pathologic physiology.

Dr. L. M. Warfield, Milwaukee: The points made by Dr. Greeley, so far as present knowledge goes, are correct. What is thought correct knowledge today may prove absolutely incorrect tomorrow. It would seem that focal infection as such, can not be said to be a cause of diabetes, but rather that in diabetes focal infections are more apt to make their appearance.

Dr. L. F. Barker, Baltimore: Dr. Greeley has taken the middle way as regards the relation of focal infections to diabetes. When focal infections exist in association with diabetes it is desirable to get rid of them, as tending to affect the general powers of the body. Allen's recent work is of great importance in the practical treatment of the disease. A great deal of time can be saved in getting the patient sugar-free and in decreasing acidosis, in overcoming complications of diabetes, by following Allen's method. Each case should be studied for itself.

Dr. Leopold Schiller, Milwaukee, delivered a paper on "The Schick Reaction in the Milwaukee Isolation Hospital Work." covering the following:

The Schick test in Milwaukee Health Department Work.

Discovery of the Schick test. Immunity and susceptibility to Diphtheria, their relative percentage, determined by test. Technique of the test. Its interpretation. Its use in diphtheria outbreaks. Diphtheria carriers and immunity reaction. Its employment in house work and in institutions. In scarlet fever wards. Conclusions.

The Schick test is of great value in determining the individual susceptibility or immunity to diphtheria. The most susceptible age is from the 1st to the 6th year. Susceptibility is often a family characteristic, shown by the Schick test. The test may be used as a means of diagnosis in doubtful throat affections. It is good practice to test institutions and entire communities for diphtheria susceptibility. Tests might be repeated at intervals of two to three years and records kept.

The Annual Address in Medicine. "Disorders of the Internal Secretions," was given by Prof. Lewellys F. Barker, of Baltimore.

Dr. E. V. Brumbaugh, Milwaukee, in discussion of the paper of Dr. Schiller said:

The principal value of the Schick reaction lies in its application to institutions. The necessity of absolute freshness of the toxin at the time of administration, must be emphasized. This applies to all other biological products. The means and facilities in drug stores for keeping the products are unsatisfactory. Exposure results in marked deterioration. Subcutaneous administration of the toxin in the Schick Reaction is useless for diagnostic purposes. The better method of prophylaxis is the gradual development of the naturally acquired immunity rather than immunity produced by diphtheretic anti-toxin.

Dr. J. W. Fisher, Medical Director of the Northwestern Mutual Life Insurance Company, Milwaukce, delivered a paper on "Diagnostic Value of the Systotic Blood Pressure," covering the following:

A study of 3,243 persons with a systolic blood pressure of 15 or more mm. Hg. in excess of the average blood pressure for the age, extending over a period of eight years—from August I, 1907, to August I, 1915.

Mortality among applicants from 40 to 60 years of age with blood pressure about 150 mm.

Dr. Geo. C. Ruhland, Milwaukee: The practical lesson that should be taken from the paper of Dr. Fisher, is to urge the public to seek medical advice, disregarding the physical evidence of disease. The public must not wait until symptoms of disease tell them that something is wrong.

Dr. Fisher, in closing: Very little note has been taken of the diastolic pressure, except to keep a record of eertain classes of cases. There must be some eause for high blood pressure, and the doctor ought to find it. A great deal of harm is done by unnecessarily alarming a patient because he has high blood pressure.

Dr. W. F. Lorenz, Mendota, read a paper on "Wassermann Tests and Cerebro-spinal Fluid Examinations, Free of Charge."

A recent law authorizes the Psychiatric Institute to make Wassermann Tests and Cerebro-spinal examinations free of charge. Efforts made to learn how much syphilis figures as a causative factor in conditions which result in state custody by adopting the Wassermann Test as routine procedure at the Northern Hospital, Mendota, The Feeble-Minded Home, at Chippewa Falls, the Milwaukee Hospital for Acute Insanc, the State Prison, the State Reformatory, showed 12 per cent in cases of insanity, 20 per cent, in Feeble-Minded Home, and 12 per cent in the State Prison and State Reformatory.

Tests are made every day. Wasserman Test is indicated in every case that offers difficulty in diagnosis. Errors in laboratory technique are always possible, and if the Wasserman report is at variance with elinical diagnosis, suspect the laboratory first, and submit another specimen.

Dr. F. Gregory Connell, Oshkosh, in discussion said in part: By means of the service of Dr. Lorenz and the Wisconsin Psychiatric Institute, the refinements of diagnosis have been brought within the reach of the humblest citizen of the state. What the throat culture and Widal reactions have done for the acute diseases of diphtheria and typhoid, Wassermann will do for syphilis.

Dr. Daniel Hopkinson, Milwaukee: The free Wassermann examination is along the right lines, but should not apply to those who are able to pay, in justice to young men who are going to be laboratory workers. We do not believe that the hemolyzed serum will give accurate results, and it is always questioned unless distinctly positive.

Dr. W. F. Lorenz, closing: Physicians should not permit people who can afford to pay to become charitable individuals, and in such case the blood serum should not be sent to the state laboratory. The reason the Wassermann examination can be made cheaply at the state

laboratory is because of the large number of examinations made.

Prof. H. Gideon Wells, of the University of Chicago, delivered a lecture on "Experimental Investigations of Cancer," illustrated by lantern slides.

Dr. V. F. Marshall, Appleton, read a paper on "Cancer of the Lip," covering the following:

Recent statistics show increase in death rate from cancer.

No etiology of cancer discovered to date.

Hope of cancer rests in educating public, and in early diagnosis.

Cancer of lower lip curable in 95 per cent, where submental and submaxillary glands removed at same time of V-section of lip.

None but radical operation should be considered.

Dr. W. E. Ground. Superior, read a paper on "Precancer Lesions," covering the following:

An attempt to indicate some of the constitutional peculiarities that seem favorable to cancer and tumor formation; to define the inheritability of cancer, and to consider the local precursors of cancer.

Cancer is one of the most curable of diseases. Enough is known of its nature to enable the medical profession to improve cures very materially. There is available clinical evidence to the effect that the nutritional state is a most important factor in the development of the neoplasm-cancer process. Dietary treatment is a part of the after cure in properly selected cases. The whole crux of the matter of cancer prevention is that cancer never arises from healthy tissue.

(There was no discussion of the symposium on cancer.)

The Address in Surgery, being an address on "The Influence of Certain Foreign Bodies upon the Process of Repair in Fracture of the Long Bones," was delivered by Prof. Fred T. Murphy, Washington University, St. Louis.

- Dr. T. W. Nuzum, Jancsville, read a paper on "Gastric and Duodenal Ulcer in the New Born," covering the following phases:
- 1. Frequency. 2. Literature on same. 3. Character of the lesion. 4. Time of occurrence. 5. Etiology. a. Erosions. b. Thrombi. c. Syphilis. d. Tuberculosis. e. Infective. 6. Symptoms. 7. Prognosis. 8. Treatment. a. Medical. b. Surgical. 9. Report of same. 10. In older children.

Conclusions arrived at:

- 1. Uleer of the stomach and duodenum occur in the child in utero.
- 2. These are undoubtedly of thrombotic origin, the septic thrombi originating in the mother and passing through the placental circulation.
- 3. Many cases of pyloric spasm, indigestion and marasmus in infants and children are due to gastric or duodenal ulcer.

- 4. Many cases of hemorrhage from the stomach and bowels in infants, which formerly have been attributed to other causes are due to ulcer.
- 5. More frequent post-mortems would throw much light on this subject.
- 6. The treatment is usually medical, in some cases surgical.

(No discussion.)

Adjournment to 9 A. M. Friday, October 8th, 1915.

MORNING SESSION, FRIDAY, OCTOBER 8, 1915.

Meeting called to order by the President.

Dr. Mary E. Pogue, read a paper on "Constructive Legislation and Feeble-Mindedness," covering the following:

Permanent segregation the wisest and most acceptable means at the present time.

Too early to put any valuation on the present date. Perfection of intelligence tests in determining feeble-mindedness.

Have the rooms for backward children, in connection with the Public Schools, helped in solving the problem?

Reports that are coming in from the different psychiatric laboratories give about 25 per cent. positive Wassermanns.

Dr. W. F. Lorenz, Mendota, in discussion, said in part:

The subject is a timely one. Certainly I think the sterilization law will remain a dead letter. If it could be applied in the population outside of institutions, it might be effective, but as a panacea to cure freeble-mindedness, I do not think it will be effective. At least 30 per cent. of freeble-mindedness is due to tangible causes, and I think syphilis figures directly in probably 25 per cent. of such cases, and the other 5 per cent is probably due to accidents, trauma, etc.

After the role alcohol plays in feeble-mindedness, I think it unsafe to draw analogies between guinea pigs and human beings.

Tests should be made by competent people only.

Dr. Richard Dewey, Wauwatosa, in discussion said:

The one thing that is most valuable in all this discussion is what it contributes to the education of the people, and the great value of the laws in relation to segregation, sterilization, eugenics, and the like, is drawing the attention of the public to these subjects, as to the sources of insanity, feeble-mindedness and kindred conditions.

Dr. A. W. Rogers, Oconomowoc, in discussion said in part:

It is essential that the medical profession should become educated in these lines. The question of feeble-mindedness, delinquent children, etc., is a very new one to the public, and comparatively new to the profession. The question is of such pressing importance that it has

forced itself upon the press and the public through social and economic reasons.

My purpose in speaking is to call attention to what I believe to be a horrible condition in Wisconsin. When we pass on mental defectives for the purpose of enabling courts to make proper disposition, we have no way of properly disposing of them, and must send them to criminal penal institutions. I wish to make an appeal to the profession of Wisconsin to use your influence in legislative procedures to get some proper place for the segregation of these individuals, many of whom can become absolutely self-sustaining under proper environment.

Dr. Mary E. Pogue, in closing, said in part .:

In using the term "feeble-minded," a feeble-minded child is one that can not be educated in any part of our public school system at present, because it does not know enough. It seems to me, for the community, that must be our standard of it. The various tests of behavior are being worked out in different laboratories in this country, and undoubtedly will be available very soon.

The reference to alcohol as a cause of feeble-mindedness applies to a confirmed habit, and not to the occasional drinker. Alcohol is undoubtedly a poison, and produces a toxic environment.

Dr. Adin Sherman, Superintendent Northern Hospital for Insane, Winnebago, read a paper on "The Harrison Law and Its Relation to Drug Habitues," covering the following:

A brief history of opium.

A history of cocain.

Early attempts at the regulation of the use of narcotic drugs.

The Harrison Anti-Narcotic Law.

The necessity of supplementary legislation.

Estimates as to the amount of narcotic drugs used before the Harrison Law went into effect, and the reduction in the use of such since.

The responsibility of physicians and druggists.

The conclusions drawn are as follows: That the number of drug habitues in the country is greatly exaggerated.

That the amount of drugs imported is out of all proportion to the legitimate uses in medical practice. Ten or fifteen per cent of the quantity would supply this need.

That the main source of supply to habitues has been from the regular drug trade; that morally it is the duty of physicians and druggists to assist in the enforcement of the law.

That the narcotic question is one potential for great evil, but that it is of slight importance compared with other medico-sociological problems confronting us.

That the Harrison Law is effective in tracing the supply, but is the minimum requirement, and needs to be supplemented by state legislation to control the improper use of these drugs. That as far as ascertained the law as yet has interfered but little with the supply of nar-

cotic drugs to habitues, has not reduced the number materially, nor lessened the quantity of such drugs imported.

Dr. Neil Andrews, Oshkosh, in discussing said in part:

The opponents of the Harrison Act have sought to confuse the medical profession and the layman by injecting foreign matter into the law. The law is decidedly simple in its provisions, its demands are reasonable, and its purpose admirable. It aims at three things: first, publicity in the use of habit forming drugs; second, the restriction of the use of these drugs to legitimate channels; and third, the prosecution of persons using for illegitimate purposes. Physicians should prescribe none of these drugs without appending the name and address of the patient, and the registered number. The medical profession should stand behind the spirit of the Harrison Law.

Dr. Adin Sherman, in closing, said in part: One provision of the Harrison Act provides for the sale of certain drugs and preparations in good faith. This provision allows of wide interpretation, and on account of its vagueness opens quite a wide field for the sale of these drugs.

Dr. Joseph Colt Bloodgood, Baltimore, addressed the Convention relative to a conference of surgeons of various industrial corporations, the Army and Navy, Public Health, the Red Cross, and representatives of the National surgical associations, in regard to the best methods, and best and simplest material for first aid among those who employ labor, and suggested the appointment of a committee by the State Society to make a survey of the state along these lines.

A motion was made and carried that the incoming president appoint a committee of five to make an independent survey with reference to first aid measures in the state of Wisconsin, and report after the survey has been made, to the Central Board of Standardization in Washington.

Dr. Richard Dewey, Wauwatosa, read a paper on "A Question of Diagnosis Between Paresis and Manic-Depressive Insanity (Expansive Form) in Syphilitic Subject," covering the following:

Summary: Case No. 3191, Milwaukee Sanitarium, man age 46, with history of exposure and possible syphilitic infection twenty years previously. Somatic signs lacking. Develops psychosis of grandiose nature. Diagnosed at general hospital as "paresis." Wassermann test of blood and spinal fluid positive. Antiluetic treatment. Committed to State Hospital, later to Milwaukee Sanitarium. In six months patient becomes apparently normal. Discussion of differential diagnosis between manic-depressive psychosis and paresis.

Dr. G. E. Seaman, Milwaukee, in discussion, said in part: The term manic-depressive insanity is comparatively recent, but the manifestations of this group of cases have long been recognized. The delusions of manic-depressive insanity are more apt to be of sin and persecution than of grandeur, but delusions may be entirely absent, or unexpressed. In considering the diagnosis one

must also consider dementia precox, where such consideration would suggest itself.

In paresis we must consider the physical symptoms. I still believe paresis to be a fatal disease, and am inclined to think that most, if not all cases diagnosed as paresis, which recover, are cases of mistaken diagnosis. In the consideration of these cases the neurologist and ophthalmologist have much in common.

Diagnostic difficulties are met with in the early stages of the disease; in the later stages there are few difficulties in diagnosis as a rule.

In the past few years studies of the blood and cerebrospinal fluid have given results of importance. Development of laboratory methods will be of the greatest aid to the neurologist and psychiatrist in the future.

Dr. Charles A. Wright, Delavan, read a paper on "Analgesia and Semi-Narcosis During Childbirth," covering the following:

History of the development of this branch of medicine, together with the success and limitations of Ether, Chloroform, Chloral, Nitrous Oxide and Oxygen, Morphine, Scopolamine and the combination of some of these agents as connected with labor. Discussion of "Twilight Sleep" according to the Freiburg method, and some of the results obtained.

Dr. G. A. Hipke, Milwaukee, in discussion, said in part:

The subject is of interest to the general practitioner as well as to the specialist. All believe that much good has come from the use of morphine and hyoscin, or morphine and codein, especially in the first stage of labor, and by the use of chloroform in the second stage of labor.

In the use of the scopolamine and morphine, or the narcotine combination, at Milwaukee Maternity Hospital, in 53 cases we have been totally successful in about 75 per cent., partially successful in 5 per cent., and unsuccessful in 15 per cent. of the cases.

Dr. Walter Darling, Milwaukee, in discussion, said in part:

After investigating to discover just what scopolamine was, and what its action was, I decided to wait until receiving reports of men in the larger clinics, before beginning its use. I decided not to try the method, after learning that some of the best in the profession were unable to master the technique. We are seeing more surgical shock in post-partum work, and we now have such a definite entity, that I believe there is a place for an anesthetic. In my observation of nitrous oxide, it has seemed to be an entirely sufficient anesthetic. There are no after effects.

Dr. G. A. Carhart, Milwaukee, in discussion, said in part:

I cannot allow this paper to go on record in this Society until I have entered my protest against the conclusions drawn.

In a series of about 600 eases on record in the New

York Maternity Hospital, the cases were selected. Six cases would be delivered in the ordinary way, and perhaps one chosen for the scopolamine anesthesia. Unless the diameter of the mother's pelvis and the diameter of the child's head was estimated to be an absolute fit or under, there was never any suggestion of using scopolamine.

The nitrous oxide there is no question about. It is a much safer, better and more durable proposition, and will stand. I want to leave this impression with the Society, that you cannot use the scopolamine.

Dr. Julia Riddle, Oshkosh, in discussion, said in part:

I want to say that I saw a case the other day, where there was no difficulty whatever. There were no less than a dozen and a half people in the room, talking in ordinary conversation. So I want to enter a protest against the requirement of absolute quiet.

Furthermore, this is a bloodless operation in the majority of cases where this is used. There is no contraindication where the head and pelvis do not well compare.

Dr. W. H. Banks, Hudson, in discussion, said in part:

If you stop to consider that when you go into a lying-in room you are dealing with a physiological and not with a pathological process; that if left to themselves most of these cases will terminate favorably, that you are not dealing with primitive women, but with women who are suffering from the results of fastidious fashion, corsets, and lack of exercise; that you are dealing with two lives instead of one, and with dangers which come at a time when you are probably not prepared to meet them, you will be somewhat slow in injecting into a woman's system something which you cannot take out. I want to protest against the Wisconsin State Medical Society putting its stamp upon something which has been forced upon the medical profession by the lay press and popular magazines.

Dr. Carl Davis, in discussion, said in part: If morphine and scopolamine is so much more dangerous in surgery than is nitrous oxide, as would appear from the statistics gathered, the death rate in the first instance being 1 to 250, and in the other one in 100,000 to one in 750,000, or one in 5.250,000, why use the scopolamine and morphine in obstetrics, when you can get better results with the nitrous oxide?

Dr. Walter Darling, Milwaukee, stated that a simple portable machine for the nitrous oxide and oxygen is being manufactured, which will make its administration absolutely simple.

Dr. Charles A. Wright, in closing, said in part:

I want to reiterate the fact that if this is used in a hospital by experienced men, with experienced nurses, I cannot entirely agree with the men who state that it cannot be done, because it has been done, and is being done, and without question the dangers are greatly exaggerated when used in this way.

Dr. Wilson Cunningham, Platteville, read a paper on "Bifurcation of the Transverse Process of the Fifth Lum-

bar Vertebra, with Report of a Case," covering the following:

Variation in vertebrae. Embryological development. Common abnormalities. Variation in the size, shape and character of the accessories of vertebrae. Normal character of the fifth lumbar vertebra. Embryological origin and comparative anatomy of the transverse processes. Radiograph with description of the case reported. Symptomatology. Frequency of the condition. Previous cases reported. Report of case with symptoms, findings, operations and results of the operation.

Dr. Phillip Rogers, Milwaukee: This is a rare condition, and one which I never observed either in my experience or in the literature, and I would like to ask Dr. Cunningham how he explains the pain on the right side, when the abnormality is on the left.

Dr. C. R. Bardeen, Madison, in discussion, said in part:

Dr. Cunningham has pointed out the importance of the use of the X-Ray in cases that might be diagnosed as rheumatism or various troubles, where it is possible that the pain might be referred to some deformities in the spinal column. While the osteopaths and chiropractors go too far in ascribing all evils to various subluxations of the vertebra, it may be that some of the profession have not gone far enough in examining the spine in cases where there is logical reason for thinking the spine might be involved.

Dr. Wilson Cunningham, Platteville, in closing, said in part:

With reference to the question of the pain being on the right side, the body was tilted to the left, and undoubtedly the pressure upon the nerve trunks produced the pain in that region.

President Theodore J. Redelings, in closing the 1915 meeting, expressed his gratitude to the Society for the honor conferred upon him and for the splendid support given him during his term of office, and throughout the meeting, and presented the newly elected president to the Society.

Dr. L. F. Jermain, Milwaukee, the newly elected president of the Society, expressed his thanks for the high honor conferred upon him by his election to the office of president, and gave assurance of his consciousness of the duties and responsibilities of the office. He suggested for the coming year the adoption of the motto, "A Greater and Better Medical Society, a Greater and Better Medical Wisconsin."

On motion unanimously carried, a vote of thanks was extended to the chairman of the Program Committee and the chairman of the Arrangements Committee.

On motion unanimously carried, a vote of thanks was extended to the retiring president of the Society for his efficient services while in office.

The Convention adjourned.

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Beilitz, Alfred. Monroe, Utah.
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Boerner, R. W., Milwaukee.
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Brueckbauer, Geo., Plymouth,
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Christensen, F. M., Milwaukee.
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Chander, Jos., Pardeeville.
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Chander, Jos., Pardeeville.
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Christensen, F. C., Racine.
Christensen, F. C., Racine.
Christensen, J. W.

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Corlett, M. E., Oshkosh.
Corlett, M. E., Oshkosh.
Corlett, M. E., Oshkosh.
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Corry, T. T., Racine.
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Davis, I. Grant, La Crinco.
Davies, R. E., Waukesha.
Davis, I. Grant, Milwankee.
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\*Fish, E. C., Mosinee.
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Fletcher, Wm., Salem.
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Fox, P. R., Madison.
Fox, Phill, A., Milwaukee.
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Gilbert, H. R., D., Muscola.
Gilbert, H. R., D., Muscola.
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Geodard, J. B., Eur Clai

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Haven, W. S., Racine,
Haven, W. S., Racine,
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Hayes, E. P., Eau Claire,
Hayes, E. P., Eau Claire,
Hayman, C. H., Boscooel,
Hayman, L. H., Boscooel,
Hayman, L. H., Boscooel,
Hayman, L. H., Roscobel,
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Heeb, Harry J., Milwaukee,

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Heguer, G. T., Appleton.
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Heidner, G. A., West Bend.
Heim, R. R., Marinette,
Heinka, G. W., Madtson.
Heising, A. F., Menomonie.
Helgeson, E. J., New Glarus.
Helm, Arthur C., Beloit.
Helm, Ernest C., Beloit.
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Hinckley, H. G., Merrill.
Hinn, L. P., Fond du Lac.
Hipke, G. A., Milwaukee.
Holges, F. L., Monroe.
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Hoermanu, P. B., Milwaukee.
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Looze, J. J., Grand Rapids.
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McRae, J. D., Chippewa Falls.
McRae, Mudroch, Milwaukee.
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Nielols, R. M., Shehoygan Falls.
Nichols, R. M., Shehoygan Falls.
Nichols, J. B., Waukesha.
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O'Connell, D. C., Milwaukce.
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Palm, C. A., Kenosha.
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Parmely, J. O. F., Mineral Point.
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Suttherland, Fred E., Janesville.
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Sweemer, Wm., Milwaukee.
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Sweemer, Wm., Milwaukee.
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Sykes, L. G., Milwaukee.
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Thompson, W. L., Sheboygan.
Thorne, Jas. P., Janesville.
Thorneike, Wm., Milwaukee.
Trane, A. D. H., Eau Claire.
Tibbits, U. J., Waukesha.
Timm, E. W., Milwaukee.
Trane, A. D. H., Eau Claire.
Tranel, E. J., Greenleaf.
Tkadlee, Jos., Lime Ridge.
Todd, S. G., Oshkosh.
Tomkiewicz, I. G., Milwaukee.
Tranewell, C. L., Kilbourn.
Tranedwell, C. L., Kilbourn.
Treadwell, C. A., Fr., Cedar Grove.
Vanderlind. L. A

Wade, F. S., New Richmond.
Wadey, B. J., Belleville,
Wagner, Carl, Milwaukee,
Wagner, N. B., Port Edwards.
Wahl, C. M., Spring Green.
Wahl, I. S., Waisau.
Wahle, H., Marshfield.
Wakefield, F. S., West Salem.
Wakefield, F. C., Mukwonago.
Waldschmidt, J. W., Fond du Lae.
Waldschmidt, J. W., Fond du Lae.
Waldschmidt, J. W., Fond du Lae.
Waldschmidt, Wm. J., Fond du Lae.
Waldschmidt, Wm. J., Fond du Lae.
Walker, Claude W., Greeu Bay.
Walker, F. W., St. Croix Falls.
Walker, C. Laude W., Greeu Bay.
Walker, L. G., Ponnd.
Wall. H. J., Richland Center,
Walsh, C. C., Merrill.
Walters, D. N., Campbellsport.
Ward, J. P., Wankesha.
Warfield, L. M., Milwaukee.
Was. Edward, Oostburg.
Washburn, W. H., Milwaukee.
Washburn, W. H., Milwaukee.
Waters, Don, Grand Rapids.
Waters, Hugo, Nekoosa.
Watson, F. V. Antigo.
Waufle, Guy C., Janesville,
Weaver, L. A., Iron Belt.
Weber, A. J., Milwaukee.
Webb, E. P., Beaver Dam.
Webb, W. B., Beaver Dam.
Webb, W. B., Beaver Dam.
Webster, R. N., Rice Lake,
Web, E. P., Bend.
Weidman, Wm. J., Milwaukee.
Webl, W. J., West Bend.
Weidman, Wm. J., Milwaukee.
Wehle, W. J., West Bend.
Weidman, Wm. J., Milwaukee.
Weingart, W. F., St. Cloud.
Werner, R. F., Eau Claire.
Westhofen, R. C., Milwaukee.
Westhofen, R. C., Milwaukee.
Westhofen, R. C., Milwaukee.
Westhofen, R. C., Milwaukee.
Westhofen, R. G., Milwaukee.
Westhofen, R. G., Milwaukee.
White, M. J., Wanlington.
White, A. G., Milwaukee.
White, M. F., Bau Claire.
Westhofen, R. C., Milwaukee.
White, M. J., Wanlington.
White, R. M., Prairie dn Chien.
White, W. E., Buplington.
White, R. M., Prairie dn Chien.
White, W. E., Behboygan.
Wiley, F. S., Fond du Lac.
Williams, M. L., Milwaukee.
Williams, M. A., Genonowove.
Williams, M. A., Chippewa Falls.
William Wolfgram, O. G., Lyon. Wolfer, H. A., Green Bay.

\*Wood, Edmund F., Janesville. Wood, F. C., Wanpaca. Woodhead, F. J., Merton. Woodworth, D. W., Ellsworth. Wright, A. E., New Riehmoud. Wright, Chas. A., Delavan. Wright, F. R., West Allis. Wright, J. C., Antigo.

Burton, J. J., Milwaukee. Roethke, R. W., Milwaukee, Wiedner, Max C., Milwaukee. Schroeder, J. C., Milwaukee. Yaffe, Aarou, Milwaukee, Yates, J. L., Milwaukee, Yonke, A. E., Milwaukee, Yonnans, L. E., Mukwouago, Young, Albert F., Milwaukee, Young, Geo, H., Elkhorn, Young, Joseph H., Elkhorn, Young, Will, Ft, Atkinson, Ziegler, J. F. B., Eau Claire.

> NEW MEMBERS 1916. Not on the 1915 list.

Armbruster, B. F., Milwaukee, Brook, J. J., Milwaukee, Goerkermann, W. H., Milwaukee, Kreutzer, A. G., Milwaukee. Zierath, Wu. F., Sheboygan.
Zilisch, Wm. E., Wausau.
Zilisch, Wm. E., Wausau.
Zimmerman, Amelia, Kenosha.
Zimmermann, C., Milwaukee.
Zinns, A. J., Milwaukee.
Zinns, A. J., Milwaukee.
Zivnnska, J. F., Milwaukee.
Zwickey, W. H., Superior.
Zohlen, John P., Sheboygan.

Lillie, O. R., Milwaukee. Sherwood, M. W., Milwaukee. Davelaar, G. W., Milwaukee.

### WISCONSIN CO-OPERATES IN NATIONAL READ-ING CIRCLE.

Wisconsin is one of the first States to place books at the disposal of all the people of the State, according to the United States Bureau of Education.

Not only does the Wiseonsin Free Library Commission supply books to readers of the Young People's Reading Circle and the teachers in the State, but it will now earry its work still further by making it possible for many readers in Wisconsin to join the National Reading Circle established by the United States Bureau of Education. Furthermore, a Wisconsin University professor—Charles Forster Smith—is one of the advisory committee aiding in this national work of encouraging reading.

The following are the reading courses which the Bureau of Education has already issued:

Course No. 1. Great Literary Bibles.

Course No. 2. World's Greatest Literature.

Course No. 3. Parents' Reading Course.

Course No. 4. Miscellaneous Course for Boys.

Course No. 5. Miscellaneous Course for Girls.

Course No. 6. Thirty Books of Great Fiction.

Course No. 7. American Literature.

A certificate signed by the United States Commissioner, of Education will be given to all who complete the courses according to simple requirements given.

Besides Prof. Smith, of Wisconsin, the advisory committee includes: Charles Alphonso Smith, professor of English in the University of Virginia; Riehard Burton, professor of English Literature in the University of Minnesota; and William Lyon Phelps, professor of English Literature in Yale University.

Where books are not obtainable in the usual way, the Wisconsin Free Library Commission offers two methods of distribution:

Traveling Libraries. In counties maintaining a county traveling library system, the authorities will undertake to supply books on the Young People's Circle list for a school or group of schools. In other counties application should be made to the Wisconsin Free Library Commission, Madison, Wis.

Parcel Post Service. The Wisconsin Free Library Commission, through its parcel post system, so far as its resources permit, respond to all requests for books on the Young People's Reading Circle list. For books or particulars apply to Wisconsin Free Library Commission of Madison, Wis.

# CHEAP IMITATIONS OF WELL-KNOWN PREPARA TIONS PEDDLED TO DRUG STORE

PROPRIETORS.

Several shipments of worthless imitation drug products have been seized by the officials in charge of the enforeement of the Food and Drugs Act. Itinerant peddlers are selling to drug stores large quantities of preparations made up and labeled in imitation of high priced patent medicines of foreign origin. Only small quantities of the genuine medicines have been imported since the war began, causing a great increase in prices. Unserupulous manufacturers are attempting to reap a harvest by substituting for the genuine medicines cheap eliemicals with no medicinal value whatever. In order to make it difficult to trace these preparations to the parties responsible for their manufacture, they are not usually distributed through the regular channels of commerce, but are peddled about to drug stores by itinerants who make immediate delivery at the time of sale.

A preparation put up in imitation of "Neosalvarsan," a medicine which has largely displaced the preparation known as 606 in the treatment of syphilis, is being distributed to drug stores in this manner. A sample labeled "Neosalvarsan," which was recently examined by the Department, was found to be nothing more than salt colored with a coal tar dye, none of the genuine neosalvarsan whatever being present. The label on this product was an exact reproduction of the genuine imported neosalvarsan, or it was an original container refilled with the imitation article.

This fraud is held to be particularly flagrant, according to the medical experts of the Department, not alone because a worthless preparation is sold for a high price, but mainly because neosalvarsan is usually administered by injection directly into the blood of the syphilitic patient. The cheap substitute is not only worthless in the treatment of this disease, but when injected directly into the blood might work considerable injury.

Other preparations which are peddled to druggists and purport to be acetylsalicylic acid, commonly known as aspirin, a medicine of foreign origin regularly prescribed by many physicians for certain ailments, have been seized by the officials in charge of the enforcement of the Food and Drugs Act, because an analysis showed that the products were worthless imitations.

United States Dept. of Agriculture.

### **ABSTRACTS**

HEMORRHAGE INTO THE LYMPHATIC VESSELS OF THE OCULAR CONJUNCTIVA. Elschnig, A., Prag. (Centralbl. f. prakt. Aug., 39, p. 8), observed in several cases of subconjunctival hemorrhage effusions of blood into the lymphatic vessels of the ocular conjunctiva, which has never before been described. The conjunctiva over the subconjunctival ecchymosis was slightly swollen, casier movable, and showed under the loupe or the corneal microscope in front of the ecclymosis varicose blood-red dentritic tubes of 1 mm. diameter, communicating with each other, and movable with the conjunctiva. They correspond in their arrangement and extension with the well known lymph cctasiae of the conjunctiva. blood could not always be expelled, but the blood column could be displaced by pressure with the finger through the lid. In all cases the hemorrhagic tubes disappeared within three days at the highest, while the ecchymosis required longer time for absorption. In none of the sis nor anything definite on the origin of the filling of the lymphatics with blood could be ascertained.

C. ZIMMERMANN.

DUODENAL ULCER IN INFANCY AN INFECTIOUS DISEASE. L. Gerdine and H. F. Helmholz (Amer. Jour., Diseases of Children, Dec., 1915) call attention to the frequency of duodenal ulcers in infants. They studied two series, one reported by Helmholz in 1909 and a recent one of eight cases which occurred among infants at the Children's Memorial Hospital. They believe the disease is due to streptococcus and that it is not only infectious but also is apt to be epidemic. They found diplococci in the bases of the ulcers in ten out of fourteen ulcers in two previously reported series. In all eight of this present series the cocci were found in such numbers and in such position that the conclusion seemed inevitable that they were the etiologic factor. In one case they isolated a Streptococcus viridans which when injected into rabbits and dogs localized in the pyloric end of the stomach and duodenum and there produced hemorrhages and ulcerations. The disease is never diagnosable unless there are complications such as rupture of a blood vessel or perforation into the peritoneal cavity. In one of their cases of hemorrhage, death occurred a week later from an inter-current infection and at autopsy the ulcer was practically healed. In atropic infants the prognosis is bad.

THE AMMONIACAL DIAPPR IN INFANTS AND YOUNG CHILDREN. J. Zahorsky (Amer. Jour., diseases of Children, Dec., 1915) says that the ammoniacal diaper is frequently encountered by the practitioner. He himself has seen a number of cases. The skin lesions which are caused by this condition consist of inflamed areas on the inner side of the thighs, the genitals, the buttocks and the lower abdomen. Vesicles and blebs also occur which may be confined to the prepuce in boy babies. A blister at the meatus is also found and deserves notice as it has not hitherto been described by pediatrists. This

occurs only in boys who have been circumeised. In girl infants the ammoniaeal diaper is often the cause of pyelocystitis. The diagnosis is easy when the diaper is smelled. The odor of ammonia is strong.

He has succeeded in discovering the cause of this frequent condition. It is due to the insufficient rinsing of the diapers after they have been washed in strong alkaline soap. The alkali left on the diaper decomposes the ammonia in the urine. This causes the irritation of the skin. Obviously a neutral or slightly alkaline urine decomposes more readily than a highly acid urine. Prophylaxis consists, therefore, in careful rinsing of the infant's diapers in clear water after they have been washed. This should be of great interest to all who see many infants in their practice.

HISTOLOGICAL CHANGES IN EXPERIMENTAL CHOKED Disc. Rados, Andreas, (Arch. f. Aug., 79, p. 199), produced in rats by intracranial inoculation of sarcoma brain tumors which grew slowly, so that after from 4 to 6 weeks symptoms of intracranial pressure were noticeable. The blood supply of the central artery of the rat is furnished by an artery coming from the middle meningeal, which goes to the internal or external ophthalmic artery. The ophthalmoscopic and histological examinations in these inoculated animals showed a remarkable resemblance to the human choked disc: fungiform projection and enlargement of the disc, ampullar distension of the intervaginal space, proliferation and swelling of the arachnoidal cells, edematous, i. e., serous imbibition of the supporting tissue of the disc, and always small hemorrhages. The more intense infiltration with round and spindle cells indicated a later The experiments showed, that choked disc develops more rapidly on the inoculated side. The experimental choked disc, produced by intracranial inoculation of virulent tumors similar to the natural conditions, suggests a mechanical etiology. The findings however so far did not disclose the finer mechanism of the genesis of choked disc.

ON AN INTRAOCULAR SPINDLE CELLED SARCOMA PRO-DUCED BY A FILTERABLE VIRUS. Stargaardt, Bonn, (from the Institute for Ship, and Tropical, Diseases at Hamburg. Zeit. f. Aug., 33, p. 256), succeeded in producing a spindle celled sarcoma in the anterior chamber, iris, chorioid, and lids, of the chicken by injecting into the anterior chamber and vitreous with Pravaz's syringe 0.05 c.cm. of the opaque fluid, obtained by rubbing with salt solution in a mortar a piece of a tumor of a chicken, of the type discovered by Rous. His inoculations of the same fluid, filtered through Berkefeld filters, into the anterior chamber of fowls were negative, but the same injection of 0.1 c.cm. into the vitreous of the other eye produced a large tumor of the chorioid, ciliary body, and both lids. The morbid agent must be classed under the group of filterable pathogenic germs. It passes Berkefeld filters, endures drying, cold, and heating to 70° C, and glycerin, but is destroyed by bile and saponin. Roentgen rays do not destroy the virus, ultraviolet rays destroy the tumor cells without exerting a noticeable influence on the agent. C. Z.

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L. M. WARFIELD, M. D., Editor 79 Wisconsin Street, Milwaukee

J. P. McMAHON, M. D, Managing Editor 141 Wisconsin Street, Milwaukee

Publication Committee:

A. J. PATEK, M. D. Milwaukee

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No. 8

### **EDITORIALS**

### 1916.

To all we wish a Happy and Prosperous New Year. Let us not make any regular resolutions but let us all work for a better, bigger Society, for Wisconsin first, last and all the time.

#### NOTICE.

Your present membership in The State Medical Society expired January 1st as did your subscription to The Wisconsin Medical Journal. Your medical defense will lapse Feb. 1st if 1916 dues are unpaid.

The only way to renew your membership and to in; sure the receipt of future copies of the Journal is by making an immediate remittance of your 1916 dues to the secretary of your County Medical Society. Remember he is serving without remuneration and should not be asked to expend time and energy in collecting your dues.

Send your secretary a check TODAY;

#### Thereby

Contributing your share toward organized medicine in Wisconsin,

Paying your subscription to your Journal. Keeping your medical defense in force, and Co-operating to minimize the labor of your officers.

### BUSINESS!!

DUES ARE PAYABLE JAN. 1ST. THIS IS AN IMPORTANT MATTER FOR YOU TO REMEMBER, FOR THE WORK OF THE SOCIETY IS GROWING IN MAGNITUDE SO FAST THAT BUSINESS PRINCIPLES MUST BE FOLLOWED. DO NOT MAKE ANY MORE TROUBLE FOR YOUR COUNTY SEC-RETARY THAN YOU CAN HELP—REMEM-BER, HIS IS A LABOR OF LOVE AND IT IS UNFAIR TO COMPEL HIM TO DUN YOU AGAIN AND AGAIN — THEREFORE, PAY YOUR DUES PROMPTLY. ALL MEMBER-SHIPS TERMINATE DECEMBER 31ST, BUT IN ORDER TO GIVE OLD MEMBERS A CHANCE TO RETAIN THEIR MEMBER-SHIP, THEY ARE ALLOWED 30 DAYS IN WHICH TO BE REPORTED TO THIS OF-FICE. ANY OLD MEMBER NOT REPORTED AND PAID FOR BY FEB. 1ST IS DELIN-QUENT AND NOT ELIGIBLE TO MEDICAL DEFENSE. HE LOSES ALL RIGHT TO DE-FENSE FROM JAN. 1ST UNTIL THE TIME HE FINALLY PAYS. NO MEMBER CAN AFFORD TO BE WITHOUT DEFENSE A SINGLE DAY. BE SURE TO PAY YOUR DUES EARLY AND AVOID TROUBLE.

### THE PRESENT NUMBER OF THE JOURNAL.

This number is almost wholly given to the Proceedings of the House of Delegates at the last Annual Session held in Milwaukee in October. The reports of the various committees are printed in full so that the members of the Society may have accurate knowledge of what their Legislative body is doing.

We wish to call attention to the report of the Committee on Medical Defense, especially to the remarks by Dr. Seaman. The members, sooner or later, will have to decide whether they wish to be assessed more for this service or whether they wish it discontinued. The question will surely come up at the next meeting in Madison and it behooves all to think scriously upon the matter. We are getting our protection at a ridiculously low rate. Naturally, we wish to keep it as low as is consistent with adequate service but with the present report as a basis we feel that we cannot keep our present per capita rate.

Think this over between now and the next meeting so that we may speedily dispose of the matter when it is brought before the House of Delegates.

### WORKMEN'S COMPENSATION.

The interest that was evidenced in the reading of the papers on Workmen's Compensation shows that the medical profession is at last waking up to a realization of the part it is now playing, and the larger part that it must play in the future, in social betterment legislation.

Compensation legislation is an intensely practical form of social betterment legislation. It is not a modification of the common law relating to industrial accidents but an entirely new conception of the compensation for injuries.

One-half of the states of the Union today have compensation laws on their statute books. In the creation of these laws the medical profession has played practically no part. Its attitude was one of mere acquiescence. That the profession has not been exploited in the enactment of these laws is merely a matter of good fortune. It speaks well for the fairness of the legislators who passed the laws; but will that condition prevail in the future?

Mr. Crownhart pointed out that during the past year the Compensation Act cost the employers of this state approximately \$2,000,000. Of that \$800,000 was distributed to injured workmen for compensation for injury; \$400,000 was paid to physicians for medical services, and the balance, \$800,000, was paid to the insurance companies in the form of premiums. In other words, the insurance companies charged the employer 66 cents for every dollar of the employer's money that they distributed. This seems to be an excessive overhead charge. Retrenchment must eventually occur. In-

surance companies are private corporations whose chief interest is in the production of dividends. Will they retrench or will the patient, non-aggressive medical profession submit to a reduction of their well-earned fees?

Already the Industrial Commission has been given the power to pass upon the reasonableness or unreasonableness of fees for medical services. In the course of time the decisions of the Commission in the matter of fees will establish precedents by which all fees will be judged.

It is possible that eventually the State will take over the insurance features of the Act. In that event it will be recognized that in administering the Act physicians are performing a social service and the rewards for such service will be judged accordingly.

This is merely one of the numerous problems involved in legislation of this character which directly concern the medical profession. Even now it is still in the experimental stage. Modifications will be made as experience demonstrates their necessity.

Compensation legislation for industrial accidents is merely the introductory effort along similar lines. It is the opening wedge for the creation of legislation along allied channels.

Insurance against sickness, old age, unemployment, the pensioning of widows and orphans, and maternity insurance are the logical followers of industrial compensation insurance.

When we realize that only five to six per cent of workmen suffer industrial accidents in a year and that sickness affects forty to fifty per cent; when we realize that the annual total loss to the thirty-three millions of wage earners in this country due to sickness alone amounts to \$651,000,000, and that a high proportion of this illness is absolutely preventable then can we understand the enormity of the problem that must eventually confront the medical profession.

This legislation is bound to come. As individuals and as a class we must be alert to our responsibilities and the protection of our rights and privileges. We must familiarize ourselves with the theoretical ideals and the practical possibilities of these problems in order that we may have a part—and a large part—in the moulding of this constructive legislation.

Smug complacency on the part of the medical profession will result disastrously for us. The bit-

ter struggles of the German physicians with the siek benefit societies should teach us the lesson of preparedness.

Our duty to ourselves and to the public demand that we take a large part in the direction of public opinion along these broad, humanitarian lines. We should lead and not be led. W. F. Z.

### SAVING THE BABIES.

The surest index of the advancement of civilization is not the training of men to kill other men or the better manufacture of death-dealing machinery, but the real, earnest effort on the part of society to conserve life.

No more vital movement has been launched in this country than the American Association for Study and Prevention of Infant Mortality. The name itself is significant. First study the causes of a condition then seek the remedies. Much of the sociological work has been hampered and even been annulled by the failure to appreciate the fundamental facts in removing causes of social evils, viz.: first find the causes. Two very important meetings will be held in Wisconsin during this year, both having to do with the conservation of infants. In March there is planned to have "Baby Week". This project emanates from the Children's Bureau of the U.S. Government and is being actively fostered by the Women's Clubs. The actual management of the campaign could be in no better hands. Active assistance is promised by the Children's Bureau and any information is sent free to those who write the Department. Attention Mrs. Goodwin.

The other meeting is the Annual Meeting of the American Association. In 1915 the sessions were held in Philadelphia. This meeting bids fair to be of great moment to all this section of the eountry. The Association itself is but a child, six years old, yet in the short six years it has grown to more than man's size and has had profound influence on health boards and social workers.

We, in Wisconsin, are to be honored with the seventh annual session. Dr. J. G. Taylor, Milwaukee, was recently elected one of the Directors and a member of the Executive Committee and is expecting active help from all who are interested in "Better Babies" and fewer deaths among infants. A campaign for membership will be started shortly.

We must get behind this idea and push hard. To have this live and intensely active association meet here with a handful of Wisconsin members would east deserved odium on us all. When you, and you, and you are called upon to help, then help all you can. Let us make this a meeting which will set a high-water mark for such gatherings and which will be a model for others to attempt to equal.

## THE DISCUSSION OF PAPERS AT THE ANNUAL MEETING.

We wish this early in the year to call attention to a flagrant error on the part of certain Program Committees. This error is in a sense vital as it effects the whole tone of the meetings of the General Session. We refer to the pernicious practice of placing on the program the names of members to discuss papers when these members have not even had the courtesy of an invitation extended to them. But most important they never see a copy of the paper they are expected to discuss.

The proper procedure is for the Chairman of the Program Committee to ask an author to name two or three men to discuss his paper. The chairman then writes to these men asking them if they will diseuss such and such a paper by Dr. —. When acceptances are received, note should be made of them and at least two weeks before the meeting a copy of an author's paper should be in the hands of every member who has signified his acceptance of the invitation to discuss any particular paper. Only in this way can we have real discussions. We know of quite a number of members who at the last meeting arrived at the hall and were astounded to see their names printed as leaders in the discussion of the various papers. Some refused to enter the discussion, others discussed under protest. This state of affairs should not exist. There is no excuse for it and it tends to discursive rather than intensive discussion.

We hope that the next Program Committee will not make this mistake. We feel sure that we shall have a snappier meeting if the leaders of the discussions are upon their toes ready to pick holes in the papers or to amplify points made by the authors with their own experience. The president for 1916 asks for "A Greater and Better Medical Society". Here is one little contribution to help make the meeting better.

### DOES INSUFFICIENT EDUCATION PAY?

Two ineidents recently have occurred which throw an interesting light upon the question of licensing members of quasi-medical seets to practice upon the public. In Wisconsin we are especially interested because our last legislature passed an onmibus aet which has established a precedent in granting exemptions and special privileges to at least two of the most pernicious of the sects, the Christian Scientists and the Chiropractors. In spite of vigorous assertions to the contrary the present Chiropraetor is the osteopath of the early days of Dr. Still. The world advances by waves. A crest then a hollow, then a crest a little higher, then a hollow not quite so deep and so on. The Chiropractors now representing the hollow, will not be able to stem the steady advance of medicine to the same extent as the osteopaths stemmed it. The world learns and usually it can not be fooled twice by the same tricks.

An osteopath, the editor of one of the periodicals devoted to the propaganda, lost his little son from diphtheria. The boy had the disease four days before a physician—graduate of Class C school—was called to see the case. The physician diagnosed diphtheria but he thought lobelia was better than antitoxin. The editor is now urging osteopaths to use antitoxin in diphtheria. His editorial comment, as the J. A. M. A. says, is truly pathetic. He bemoans his own lack of preparedness, says that he never saw a case of diphtheria, did not look in his son's throat and if he had, would not surely have recognized the condition. His celf-abasement is almost heart-rending and he frankly admits his ignorance.

Other osteopaths comment in the periodical about their unpreparedness to handle cases of the common eruptive fevers. They do not understand antitoxin, never used it, of course, etc., etc. We doubt if this sort of case is so uncommon. The fact that it was the editor's son has brought it into the limelight.

The other ease quoted by the Journal is taken from a report in the Missouri State Journal. Briefly, a boy while playing football suffered an injury to the cervical spine. He was taken to the City Hospital where rest and immobilization were employed. The boy's father engaged an osteopath who wanted to treat the boy immediately. This was refused by the surgeon-in-charge, whereupon the father and the osteopath repaired to the City

Hall where they obtained an order from the mayor to the hospital commissioner, "relieving the hospital physician from further responsibility" and permitting the osteopath "to try to save the patient as the doctors had given him up." The account states that for five days the boy had been resting quietly. The osteopath came in and attached a jury-mast to the patient's head. There was more shock, cyanosis, and death occurred in two hours.

Here is a fine kettle of fish. A misguided mayor assuming the role of arbiter in a question involving accurate knowledge aequired by years of special study! It is also an instance of the truism that it takes more knowledge to know what not to do than to know what to do. This is a point lost sight of by the average man. He wants something done, something that he can see is being done. He does not appreciate the fact that knowing when not to interfere with nature is often the highest therapeutic skill.

These two instances coming so close together emphasize the need of a solid front in the medical profession against the forces which are continually trying to beat down the bars of better education for those who attempt to treat the siek and injured.

### NEWS ITEMS AND PERSONALS

Dr. Oscar Houck, La Crosse, who has been suffering from anemia for the past year, was operated upon December 11, by Dr. Nelson Perey of Chicago. The spleen was removed and blood transfused.

Dr. CLAUDE Brewer, Jefferson, has returned after two months' of study, in diseases of the eye, ear, nose and throat, in New York.

Drs. F. S. Wasielewski, R. S. Teschan and R. W. Blumenfeld have been appointed trustees of Milwaukee Emergency Hospital for two year terms. Drs. Wasielewski and Teschan are reappointed, while Dr. Blumenfeld succeeds Dr. Gaenslen.

Five new physicians were appointed for Milwankee County Hospital, their terms commencing January 1st, 1916. They are: Drs. John W. Smith, Leroy Horner, George Whalen, William Holtz and C. W. Lippett.

Drs. George H. Dickinson, Martin J. Trock, Paul H. Rupp, A. C. Sidler, J. H. Rohr and H. T. Brogan, were appointed county physicians for Milwaukee County, following the report of the competitive examination held on December 21.

Dr. Frank Brockway, Oshkosh, was appointed superintendent of the State Tuberculosis Sanatorium at Wales on December 17, by the State Board of Control. He succeeds Dr. Norman Hoffmann.

Dr. E. S. Schmidt, Green Bay, has been appointed oculist for the Chicago, Milwaukee and St. Paul Railway Company for Green Bay and the surrounding territory, succeeding the late Dr. Ira M. Martin.

Dr. John P. Koehler, Milwaukee, for two years coach of the Marquette University eleven, has resigned his position to resume the practice of medicine.

Dr. Anton G. Zeiss, Sheboygan, was, on Nov. 27, elected county physician for Sheboygan County, defeating Dr. Henry G. Brueckbauer, by a vote of 23-11.

Dr. F. H. Hagerman, Milwaukee, was fined \$25.00 and costs in district court, on Dec. 9, when he pleaded guilty to neglecting to file a certificate of birth.

Drs. F. F. Fowle, P. T. Trowbridge and Harry Sargeant, have been appointed assistant physicians by Dr. A. F. Young for the Milwaukee Hospital for the Insane at Wauwatosa.

Dr. John J. Burke, Algoma, who has been critically ill, is improving.

Drs. C. E. Stubenvoll and E. L. Schroeder have formed a partnership for the practice of their profession at Shawano.

Dr. Edmund E. Ryan, Milwaukee, is seriously ill at Trinity Hospital.

The verdict of the jury in the mal-practice suit in which the LaCrosse Hospital and Drs. W. A. Henke and B. W. Mast are defendants, attached no blame whatever to the treatment given by the surgeons either during the operation or following it, and makes no charges of neglect. The point involved is whether the nurses were guilty of neglect. The case will be taken to the Supreme Court.

STEFAN W. SOBOLEWSKI, Milwaukee, was sentenced to six months in the house of correction for practicing medicine without a license.

The Program Committee of the State Medical Society consists of Drs. Curtis A. Evans, Milwaukee, Chairman, Otho Fiedler, Sheboygan, and Rock Sleyster, Waupun.

Dodgeville, Wisconsin, will soon have a new hospital, to be known as the Dodgeville General Hospital, costing about \$50,000.

The Children's Free Hospital of Milwaukee has established a dispensary service in a building next door to the hospital. Hours have been arranged for consultations in the various departments of medicine and surgery. Anyone wishing particular information may apply to the hospital.

Bloomer, Wisconsin, has a new hospital, which was opened to patients on November 25th.

DR. ARTHUR BLUNT, Chicago, was sentenced by Judge Landis to serve two years in the federal penitentiary at Ft. Leavensworth, and pay a fine of \$2,500, for violation of the Harrison anti-drug act. It was shown that he sold 20,000 prescriptions for drugs in a period of six months, after the law went into effect. William A. Wallace, a druggist, tried with Blunt, as the man who filled the prescriptions, was sentenced to five years and a fine of \$10,000.

Wisconsin maternity hospitals and homes for infants, must make applications for licenses, under a new state law, effective on January 1, 1916. Under a ruling of the attorney general, all hospitals which regularly handle confinement cases or maintain maternity wards are included among institutions which must secure licenses. No fce is required, the law being designed merely to bring these institutions under state authority for the purpose of inspection. Every infant must be reported to the local health authorities within twenty-four hours after birth.

Antigo, Wisconsin, has an epidemic of small-pox, thirty-seven cases being reported.

Massage and hydrotherapeutic operators will be compelled to take out licenses under the new state law, passed at the last session of the legislature. Those who attend to either one at the exclusion of the other will not be compelled to take out licenses.

The Social Workers' Sanitarium, which for the past four months has been operated by Milwaukee County, was on December 10th turned over to the directors of the Society. The organization will

again use the sanitarium for the treatment of tuberculosis in its incipient and convalescent stages.

The State Board of Health has advised barbers that the use of the styptic pencil or lump alum to stop blood flow, is prohibited by law. Germs in the blood adhere to the caustic and are easily transmitted to the next customer.

Dr. G. F. Lydston, Chicago, has won his five year battle against the American Medical Association, when the supreme court upheld the decision of the appellate court, and ordered the removal of the present board of directors. The warfare between Dr. Lydston and the Association began when the physician attempted to prevent Dr. George H. Simmons, from holding three offices at the same time. He claimed the affairs of the association were controlled by an oligarchy.

The American Society for the Control of Caneer, in a statement made public on December 27th, announced that a special census report on deaths from caneer in the United States during 1914 is in preparation, and will be issued shortly after the first of the year. 35,000 letters of inquiry have been sent to physicians who certified deaths from cancer in 1914.

Dr. Emmanuel F. Oehler, St. Louis, has been expelled by the St. Louis Medical Society on the charge of offering the "split" a fee for a surgical operation. The expulsion was announced in the monthly journal of the society.

The annex to the Milwaukee County Hospital, used in caring for tuberculosis patients, will not be closed as a result of the opening of Muirdale. Dr. Schulz, superintendent of the Hospital believes the annex will be used for emergency cases. Where patients are committed to Muirdale, through the county court, there necessarily is some delay. Many of these cases require immediate care and treatment, and the annex would serve admirably that purpose.

The Twelfth Annual Conference on Medical Education, Public Health and Legislation, will be held at the Congress Hotel, Chicago, February 7 and 8, 1916, under the auspices of the Council on Medical Education, and the Council on Health and Public Instruction of the American Medical Association. Monday, February 7th, will be devoted to medical education, and Tuesday, February 8, to medical legislation and public health. On Wed-

nesday, February 9th, the Federation of State Medical Boards of the United States, and the Association of American Medical Colleges will meet.

All State Licensing Boards, State Boards of Health, State Medical Societies, Associations of Universities, and other organizations interested, are invited to send representatives to the conference. Dr. N. P. Colwell, Chicago, is secretary of the Council on Medical Education, and Dr. Frederick R. Green, is secretary of the Council on Health and Public Instruction.

The headquarters of the Military Surgeon, the monthly publication of the Association of Military Surgeons, have been transferred from Chicago to Washington, D. C. The newly elected secretary-editor is Lt. Col. Edward L. Munson, M. C., U. S. Army. The address of the association is: Army Medical Museum, 7th and B. Sts., S. W. Washington, D. C.

The next examination for appointment in the Medical Corps of the Navy will be held on or about February 23, 1916, at Washington, D. C., Boston, Mass., New York City, Philadelphia, Norfolk, Va., Charleston, S. C., Chicago, Mare Island, Cal., and Puget Sound, Wash.

Applicants must be citizens of the United States, and must submit satisfactory evidence of preliminary education and medical education.

The first stage of the examination is for appointment as assistant surgeon in the Medical Reserve Corps, and embraces the following subjects: (a) anatomy, (b) physiology, (c) materia medica and therapeutics, (d) general medicine, (e) general surgery, (f) obstetrics.

The successful candidate then attends the course of instruction at the Naval Medical School, which will begin on or about Oct. 1, 1916. During this course he receives a salary of \$2000 per annum. with allowances for quarters, heat and light, and at the end of the course, if he successfully passes an examination in the subjects taught in the school, he is commissioned an assistant surgeon in the Navy to fill a vacancy.

Full information with regard to the physical and professional examinations, with instructions how to submit formal application, may be obtained by addressing the Surgeon General of the Navy. Navy Department, Washington, D. C.

W. C. Braisted. Surgeon General, U. S. Navy.

### **MARRIAGES**

Dr. F. M. Scheele, Waukesha, and Miss Emma L. Edmonds, Milwaukee, on December 2, 1915.

### **DEATHS**

Dr. Eugene W. Beebe, Milwaukee, died on December 20, 1915, following a stroke of paralysis, aged 75 years. Dr. Beebe was born in Canandaigua, N. Y., on February 21, 1840. He was graduated from the Hahnemann Medical College, Chicago, in 1866, and began practice at Stoughton, Wis. He later removed to Evansville, where he practiced fourteen years. After special study in New York, Dr. Beebe, came to Milwaukee in 1880, beginning practice as an eye, ear, nose and throat specialist. He was a member of Milwaukee County and the State Medical Societies.

Dr. Laura J. Ross Wolcott, long a resident of Milwaukee, died on December 8, 1915, at her home at Ravenswood, Ill., aged 82 years. Dr. Wolcott was born at York, Maine, July 16, 1834, and was educated in New England, being one of the graduates from the first normal school in this country, instituted in Massachusetts. She later studied as a private pupil of professors at Harvard, the admission of women to colleges not being permitted at that time. She was a graduate of the Women's Medical College of Pennsylvania in 1856, and shortly thereafter located in Milwaukee. She was the widow of the late Dr. Erastus B. Wolcott, who was surgeon general of Wisconsin during the Civil War. Dr. Wolcott was the third woman in the United States to receive the degree of M. D.

Dr. Leonard L. Knapp, New Richmond, died on December 15, 1915, at St. Joseph's Hospital, St. Paul, of a complication of diseases, originating from infection of the bowels, aged 64 years.

Dr. Knapp was a native of Maine, born in Franklin County, March 21, 1851. He was educated at Western State Normal School, Farmington, Maine, later studying at Kent's Hill. He then took up the study of medicine, graduating at the University of Michigan, Department of Medicine, in June, 1883, and located at New Richmond the same year. Dr. Knapp served as health officer of New Richmond for several years.

### REMOVALS

Dr. Adolph Detuncq, Neshkoro to Fredonia Station.

Dr. W. Zimmermann, Milwaukee to Reedsburg.

Dr. W. D. Harvie, Grand Rapids, has purchased the practice of the late Dr. S. G. Todd at Oshkosh and Neenah, and will locate at Oshkosh.

Dr. Dan J. Donohue, formerly of New Richmond, but more recently of Glandive, Mont., has located at Butte, Mont.

MATERIA MEDICA AND THERAPEUTICS. A Text Book for Nurses. By Linette A. Parker, B. Sc., R. N., Instructor in Nursing and Health, Teachers College, Columbia University. 12mo, 311 pages, illustrated with 29 engravings and 3 plates. Cloth, \$1.75, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The author's aim as stated in the preface "to present the use of drugs from a scientific basis in such a way as to appeal to the nurse's interest," has been well accomplished. The subject is presented in a very interesting manner with a number of new features which will appeal especially to the teacher. The first part of the book deals with weights and measures, the metric system, solutions, percentage, ratio etc. Each of these chapters is ended with a set of problems designed to bring out the important points set forth in the text. The classification of drugs is based on their action on the different parts of the body i. e., those which have their chief action on the nervous system etc. etc. It contains a very helpful chapter on suggested topics for review; one on prescription writing, and another containing a brief resume of Legislation concerning poisonous and habit forming drugs. The latter part of the book contains short but interesting chapters on Psychotherapy, Elcctrotherapy, Hydrotherapy, Vaccines and Serums and Ray Therapy.

The work is superior in every respect and should meet with favor as a text-book in Training Schools.

C. V. N.

X-RAYS: How to Produce and Interpret Them.. By Harold Mowatt. \$3.00. Oxford University Press, New York and London.

This little treatise is confined to a most elementary presentation of the subject of Production and Interpretation of X-Rays. The presentation is simple—too simple. There have been so many books and pamphlets published on the elementary consideration of the X-Rays, that this volume seems rather superfluous. Nothing new is considered. The presentation is too elementary for any except laymen of but average intelligence.

### THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

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Officers 1915-1916

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M. R. WILKINSON, Oconomowoc
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TERM EXPIRES 1921

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Program Committee OTHO FIEDLER, Sheboygan

ROCK SLEYSTER. Waupun

NEXT ANNUAL SESSION, MADISON, OCTOBER, 1916.
The Wisconsin Medical Journal, Official Publication

### LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

County.	President.	Secretary.
Ashland-Bayfield-Iron W	T. O'Brien, Askland	O. Braun, Ashland.
Barron-Polk-Washburn-Sawver-Burnett	N. Nelson, Clear Lake	. I. G. Babcock, Cumberland.
Brown-Kewaunee	. H. Bartran, Green Bav	.H. C. Mix. Green Bay.
Calumet	L. R. McCollinn, Forest Junction	.F. J. Fechter, New Holstein.
ChlippewaA.	C. Nussle, Chippewa Falls	.A. L. Beier, Chippewa Falls.
Clark	H. Christofferson, Colby	.E. L. Bradbury, Neillsville,
Crawford	O. Force, Pardeeville	A. F. Schmeling, Columbus.
Dane	S Shelden Madison	A. J. McDowell, Soldiers Grove.
Dodge	E. Bachhuber, Mayville	E S Elliott Fox Lake
DoorH.	F. Eames, Egg Harbor	.T. C. Proctor, Sturgeon Bay
DouglasW	. E. Hatch, Superior	.D. R. Searle, Superior.
Dunn-PepinF.	E. Butler, Menomonie	.1. V. Grannis, Menomonie.
Eau ClaireJ.	C. Baird, Eau Claire	. E. P. Hayes, Eau Claire.
Fond du Lac	J. Pullen, North Fond du Lac	.H. C. Werner, Fond du Lac.
GrantE.	MacDonald, Cuba City	.M. B. Glasier, Bloomington.
GreenW	B. Gnagi, Monroc	. L. A. Moore, Monroe.
Green Lake-Washara-AdamsG.	E. Baldwin, Green Lake	.F. R. Silverthorn, Berlin.
fowa	D. Demon Johnson Cheek	.J. R. Hughes, Dodgeville.
Juneau	C Vocal Floor	. W. A. Engsucry, Lake Mills.
Kenosha	H Clarry Kanacha	I I MaShana Kanasha
La Crosse	Walf In Crosso	I M Furstmann I a Crosso
Lafayette	C. Hubenthal. Belmont	.H. O. Shockley, Darlington
LangladeF	V. Watson, Antigo	.J. C. Wright, Antigo.
Lafayette J.J. Langlade F. Lincoln C.	C. Walsh. Merrill	·Herbert Saylor, Merrill,
Manifowor	1 Kemper Manifowoc	. W E Donolino Manitowae
Marathon	. W. Jones, Wausau	. R. M. Frawley, Wansan.
Marinette-FlorenceE.	E. Axtell, Marinette	R. R. Heim, Marinette.
Milwaukee-OzaukeeF	ranz l'inster, Milwaukee	Daniel Hopkinson, Milwaukee.
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Outagamle	H Brooks Appleton	W N Moore Appleton
PlerceM	artin Oven. Ellsworth	R II Cairns River Falls
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Price-TaylorE.	A. Richy, Park Falls	.G. H. McClure. Westboro.
RacineF.	. J. Pope. Racine	Susan Jones, Racine.
Richland	F. Dougherty, Richland Center	.H. C. McCarthy. Richland Center
RockE.	E. Loomis, Janesville	.F. E. Sutherland, Janesville.
RuskJt	ilian C. Baker, Hawkins	L. M. Lundmark, Ladysmith.
SaukF. Shawano	D. Hulburt, Reedsburg	Roger Canoon, Baraboo.
Sheboygan	II Stangard Shehaygan	A I Knauf Shehovgan
St. CrolxPl	hilin McKeon Clear Lake	W II Banks Hudson
Trempealeau-Jackson-Buffalo	O. Nelson, Arcadla	.J. J. Powell, Galesville,
VernonJo	hn Schee, Westhy	.F. E. Morley, Viroqua.
WalworthA.	E. Midgley. Whitewater	.Edward Kinne, Elkhorn,
WashingtonH.	. Albers, Allenton	S. J. Driessel, Barton.
Waukesha	B. Noble, Waukesha	S. B. Ackley, Oconomowoc,
WaupacaII	. A. Jefferson, Clintonville	.G. T. Dawley. New London
WlnnebagoBi	arton Clark, Oshkosh	.H. W. Morgenroth, Oshkosh.
WoodJ.	13. Vedder, Marshneld	W. G. Sexton, Marshneid.

### SOCIETY PROCEEDINGS

### BARRON-POLK-WASHBURN-SAWYER-BURNETT COUNTY

The annual meeting of the Barron-Polk-Washburn-Sawyer-Burnett County Medical Society, was held at Rice Lake on December 9, 1915. The following officers were elected: President, Dr. A. N. Nelson; vice-president, Dr. E. J. Knapp, secretary-treasurer, Dr. I. G. Babcock; delegate, Dr. I. G. Babcock, alternate, Dr. A. S. White.

### COLUMBIA COUNTY.

Columbia County Medical Society held its annual meeting at the city hall, Portage, on December 8, 1915. Meeting was called to order by the president, Dr. O. O. Force. Minutes of the last meeting read, after which Dr. F. D. Bentley presented a paper on "Diagnosis in the Abdomen, with Special Reference to Sources of Error," a paper enjoyed very much by every member present. Dr. B. F. Bellack opened the discussion, followed by a general discussion by various members.

Dr. F. T. Nye of Beloit, our Councilor, was present, and through his influence the secretary was instructed to get together with the secretaries of the neighboring counties, and arrange for a district meeting to be held in May, 1916, at some convenient place, which to us seemed Madison, if such a meeting really could be brought about. Of course, it depends entirely upon the interest shown by the members of the different county societies. After the discussion of Dr. Nye's proposition, election of officers for the year 1916 took place, with the following result: President, Dr. O. O. Force, Pardeeville; vice-president, Dr. Jos. Chandler, Pardeeville; secretary, Dr. A. F. Schmeling, Columbus; delegate, Dr. F. D. Bentley, Portage; censor, Dr. B. C. Meacher. Portage.

A. F. Schmeling, M. D., Secretary.

### MILWAUKEE COUNTY.

The annual banquet of the Medical Society of Milwankee County was held on December 9, 1915, at the Hotel Wisconsin. The following officers were elected: President, Dr. Franz Pfister; vice-president, Dr. P. F. Rogers; secretary, Dr. Daniel Hopkinson; treasurer, Dr. William Thorndike; censor for three years, Dr. Lorenzo Boorse; delegates, Drs. Charles Lemon, E. A. Fletcher and R. W. Blumenthal. Dr. Richard Dewey addressed the society on "Wonder of Thought".

# MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY. SURGICAL ASSN.

The ninth annual meeting of the Minneapolis, St. Paul and Sault Ste. Marie Railway Surgical Association was held at the Radisson Hotel, Minneapolis, Minn., December 7th and 8th, 1915. The following officers were elected for the coming year: President, Dr. Theodor Bratrud,

Warren, Minn.; vice-president, Dr. John M. Dodson, Chicago, Ill.; secretary-treasurer (ex officio) Dr. John H. Rishmiller, Minneapolis, Minn. Minneapolis was chosen as the meeting place for 1916.

The following program was presented: President's Address, Dr. Alexander J. McCannel, Minot, N. D.; "A Short Discussion upon Roentgenology in Traumatic Surgery," Lantern Slides. Dr. Geo, M. Steele, Oshkosh, Wis.; "New Operation for Hernia through Petit's Triangle." Lantern Slides. Dr. John H. Rishmiller, Minneapolis, Minn. "Autografts of Bone in Fractures," Dr. Geo. F. Thompson, Chicago, Ill.; "Fracture of Pelvis," Dr. Fred Ewing, Kenmore, N. D.; "Surgical Diagnosis in Physical Examinations," Dr. S. A. Nesse, Enderlin, N. D.; "Local Anesthesia," Dr. Arthur N. Collins, Duluth, Minn.; "Dislocation of Semilunar Cartilage," Dr. O. H. Epley, New Richmond; "Sliding Hernia," Dr. Theodor Bratrud, Warren, Minn.; "Operative Clinic at the Swedish Hospital," Dr. John H. Rishmiller, assisted by Dr. Stanley V. Hodge, Minneapolis; "Anoci-Association in Theory and Practice," Dr. Blake M. Lancaster, Crosby, N. D.; "Choked Dise," Dr. Chas. D'a Wright. Minneapolis; "Splint for Fractures of Long Bones of Leg and Thigh," Dr. Frederick Townsend, Sault Ste. Marie, Mich.; "Traumatic Rupture of the Bladder." Dr. E. P. Quain, Bismarek, N. D.; "The Non-Partisan," Mr. Alfred H. Bright, General Counsel, Minneapolis; "A New Operation for Hemorrhoids," Dr. Daniel D. Murray, Dulnth, Minn.; "Non-Surgical Abdominal Conditions," Dr. Adolph O. Aaker, Velva, N. D.

A banquet, in conjunction with the Soo Line Club, was held at the Radisson Hotel, on Tuesday evening, Dec. 7.

### ROCK COUNTY

Rock County Medical Society met in the Council Chambers, Beloit, on November 29, 1915. The program included an address on "Gastric and Duodenal Ulcers" by Dr. J. F. Pember of Janesville; "Surgery of the Abdomen" by Dr. D. R. Connell of Beloit.

#### WAUKESHA COUNTY

The annual meeting of Waukesha County Medical Society was held on December 4, 1915, at the home of Dr. A. J. Hodgson. Officers for the ensuing year were chosen as follows: President, Dr. J. B. Noble, Waukesha; vice-president, Dr. J. 11. Overbaugh, Hartland; secretary-treasurer, Dr. S. B. Ackley, Oconomowoc; censor, Dr. H. A. Peters, Oconomowoc; delegate, Dr. G. E. Peterson.

### WAUPACA COUNTY

On December 1, 1915, at Iola, Wisconsin, a regular meeting of the Waupaca Connty Medical Society was held. A valuable paper "Infections of the Accessory and Nasal Sinuscs" by Dr. A. E. Rector was well received and discussed by Drs. Pelton, Lee, Dawley, Chandler and Loope, Dr. Rector's paper was illustrated by slides by Dr. A. M. Sanborn of Appleton. Dr. T. E. Loope, Iola, favored the Society with a paper "Chronic Joint Infec-

tions" together with clinical material on the same subject.

Dr. Fremont Chandler of Waupaca made application for membership; while, ye host, Dr. T. E. Loope, surprised the members with a game dinner long to be remembered.

The best of feeling prevailed, and the Society is enthusiastic about future work.

### WINNEBAGO COUNTY

A joint meeting of the Winnebago County and the Oshkosh Medical Club was held at the Hotel Athearn, on November 26, 1915. There were seventy-two physicians present. The speaker of the evening was Dr. Chas. L. Mix of Chicago. He addressed the society on "Differential Diagnosis of Ulcers of the Stomach and Duodenum, and Biliary Tract Infection." The two organizations hold sixteen meetings yearly, eight of them joint gatherings, and eight separate meetings.

### WOOD COUNTY.

Wood County Medical Society met at Grand Rapids on December 15, 1915, and chose the following officers for the ensuing year: President, Dr. J. B. Vedder, Marshfield; vice-president, Dr. J. J. Looze, Grand Rapids; secretary, Dr. W. G. Sexton, Marshfield; censors, Drs. R. P. Porter and J. C. Hayward.

### **BOOK REVIEWS**

MANUAL OF SURGERY. By Alexis Thompson, M. D., Professor of Surgery, University of Edinburgh, and Alexander Miles, Surgeon to the Edinburgh Royal Infirmary. Volumes 3, 5th Edition. Volume I, General Surgery, 774 pages with 289 illustrations. Volume II, Regional Surgery, 924 pages with 301 illustrations. Oxford University Press,, 1915. \$3.50 per volume.

The fact that this book has gone through five editions attests its popularity among the medical profession. The two chief characteristics of Thompson and Miles Surgery are completeness and conciseness, properties which are fully appreciated by the busy physician and surgeon who have but little time to wander through any reading of lengthy discussions on theoretical questions. Like many scientific books of English authorship, the subjects are presented in a very clear, simple, and concise manner, while its style makes it really interesting reading. The classification of the subject matter is excellent, thus enhancing its value as a book of reference.

The first two volumes are rich in illustrations, particularly so in regard to X-Ray photographs of diseases and injuries to the bones and joints. The discussion of surgical conditions and procedures are well up to date in most instances. However, some of the newer methods now in vogue receive no mention, such as the setting of fractures under the fluoroscope, and the late re-

searches in Hodgkin's disease. On the other hand there are frequent references to surgical conditions in the present war.

The first volume covers the general principles of Surgery, the various infections, surgical conditions of the skin, the nerves, the lymph vessels and glands, and the blood vessels, while there is also a very good presentation of the general subject of tumors. Malf of the first volume comprises chapters upon injuries and diseases of the bones and joints, and the subject matter herein is very complete in all the essentials, and shares the simple methods of presentation which are so marked a feature of the entire book.

Volume II discusses surgical conditions of each region of the body and is very full, complete and well illustrated. The third volume which is not yet off the press, deals with Operative Surgery.

This small system of surgery should appeal particularly to the medical student, and to the man in general practice, who needs such a work of ready reference; but it should also be of value to the surgeon because of the clear, concise statement of facts and the absence of discussions on debatable questions.

The Tuberculosis Nurse. Her Function and Ilea Qualifications. A Handbook for Practical Workers in the Tuberculosis Campaign. By Ellen N. LaMott. R. N., Graduate of Johns Hopkins Hospital; Former Nurse-in-Chief of the Tuberculosis Division, Health Department of Baltimore. Introduction by Louis Hamman, M. D., Physician in charge Phipps Tuberculosis Dispensary, Johns Hopkins University. Cloth, \$1.50; G. P. Putnam's Sons, New York, 1915.

The growing interest in the fight against Tuberculosis has resulted in much being written on the subject but this work from the standpoint of a nurse of such experience and ability seems especially timely and should be read by everyone interested in public health movements, especially those nurses and doctors engaged in antituberculosis work...

It is a detailed account of eight years experience as field worker and later as organizer and director of the Tuberculosis division of the Baltimore Health Department.

It presents the problems to be met in the management of a tuberculosis situation in a large city and offers a working scheme by which any city or community might conduct an anti-tuberculosis campaign. Of some of the difficulties encountered in this work the author starts out by saying, "Tuberculosis is largely a disease of the poor, or those below the poverty line. We must further realize that there are two sorts of poor peoplenot only those financially handicapped and so unable to control their environment, but those who are mentally and morally poor and lack intelligence, will-power and selfcontrol. The poor from whatever cause form a class whose environment is difficult to alter. And we must further realize that these patients are surrounded in their homes by people of their own kind-their families and friends who are also poor. It is this fact that makes the task so difficult and makes the prevention and cure of a preventable and curable disease a matter of the utmost complexity."

A strong plea is made for segregation and municipal control of tuberculosis. The author also relates how an effective nursing staff was built up first under private then under municipal control and what great care should be taken in choosing nurses for this work. The nurse should be a graduate of a first class general hospital giving a three years course and a registered nurse in those states where registration is established and should pass a physical examination by a specialist before being admitted to the work. Nurses who are not in perfect health or who have had tuberculosis and are arrested cases are not suitable because of having to be out in all kinds of weather which makes the danger of relapse too great.

The book seems to have touched upon every point necessary for the successful management of a tuberculosis crusade.

C. V. N.

MEDICAL ELECTRICITY AND RONTGEN RAYS AND RADIUM. By Sinclair Tousey, A. M., M. D., Consulting Surgeon to St. Bartholomew's Clinic, New York City. Second edition, thoroughly revised and enlarged. Octavo of 1.219 pages, with 798 practical illustrations, 16 in colors. Cloth, \$7.50, net; Half Morocco, \$9.00, net. W. B. Saunders Company, Philadelphia and London, 1915.

This book is a very extensive and exhaustive presentation of the subject of medical electricity and radioactive emanations from a working standpoint, but is so carefully and thoroughly indexed that it can be readily used for reference. The chapter on high frequency currents is carefully arranged and makes the simplest presentation of this subject seen by the reviewer.

The author wisely gives only the essentials on the theory of currents and puts his main effort on the practical applications.

Minute details are given for fluoroseopy and radiography of special parts of the body. The illustrations are profuse and illuminating. Operators are especially cautioned against the dangers of manipulation.

The chapter on radium is pertinent at this time. This book ought to be in the library of every physician interested in radioactive measures who desires an up-to-date presentation of the subject of more than elementary importance.

C. A. B.

A Practical Treatise on Diseases of the Skin. By Oliver S. Ormsby, M. D., Professor of Skin and Venereal Diseases in the Rush Medical College, Chicago. Octavo, 1.168 pages, with 303 engravings and 39 plates in colors and monochrome. Cloth, \$6.00, net. Lea & Febiger, Publishers, Philadelphia and New York.

Any book or article by Oliver S. Ormsby merits close study. The attachment of this author's name insures a thoro scientific and practical consideration of subject matter. This treatise on Diseases of the Skin is no exception. The index is so carefully arranged that the

consideration of any subject concerning the diseases of the skin can readily be found. Old subject matter is brought up to date and many well defined new diseases have been carefully differentiated and incorporated in this volume, bringing it right up to date. References appended after the consideration of any subject are sufficiently complete to be a guide to any student seeking deeper study of any particular subject. The volume is profusely illustrated with good photographs and microphotographs; the print and paper are of good quality. Especially complete and more explanatory than in older text books are the chapters on the diseases of the appendages of the skin-the Sweat Glands, the Sebaceous Glands, the Hair and Hair-follicles, the Nails and the Mucous Membranes. This treatise is an excellent one and should be familiar to every practitioner and student of medicine. C. A. B.

PRINCIPLES AND PRACTICE OF OBSTETRICS. By Joseph B. De Lee, A. M., M. D. Professor of Obstetrics at the Northwestern University Medical School. Second edition, thoroughly revised. Large octavo of 1087 pages, with 938 illustrations 175 of them in colors. Philadelphia and London. W. B. Saunders Company, 1915. Cloth, \$8.00 net; Half Morocco, \$9.50 net.

In the revision of this masterpiece of obstetrical literature the distinguished master of surgical technique has in the opinion of the reviewer accomplished much in the efforts he has put forth to bring the text up to the last minute of completeness,

However, in view of the large amount of work that has been done on blood pressure during pregnancy and its interpretation, the reviewer feels that an opportunity was lost in not devoting a chapter to this subject. It may well have found a place in the discussion of hygiene of pregnancy.

As is to be expected from the pen of this author the chapter on the conduct of normal labor, with special emphasis on aseptic technique is thorough and forceful.

Throughout the book the illustrations have been especially well chosen for the subjects under discussion.

Lengthy discussions on scientific points have given place to the delineation of definite views and procedures which in given conditions have proven successful in the author's practice.

To the reviewer this work is a standard of American practice in many subjects of obstetric science.

"Speaking of Operations." By Irvin S. Cobb. Illustrated by Tony Sarg. Small octavo, 64 pages. Price, 50 cents. George H. Doran Company, New York.

Cobb's screamingly funny account of his experiences in a hospital as a patient was read by the Reviewer when the article appeared in The Saturday Evening Post. "Screamingly funny" characterizes it for when it was read by us to a small group of people, some became almost hysterical and actually the laughter was in shouts. If you haven't read it get this book, first laugh over it yourself, then put it on your waiting room table. It will be the best tonic on the premises.

# The Wisconsin Medical Journal

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### ORIGINAL ARTICLES

ANNUAL ADDRESS OF THE PRESIDENT.\*

BY NELSON M. BLACK, M. D.,

MILWAUKEE.

As President of the Milwaukee Oto-Ophthalmic Society it is my duty as well as pleasure to bid you welcome to this our second annual meeting.

The plan drawn up by the special Committees of the American Ophthalmic Society, the Section on Ophthalmology of the A. M. A. and the American Academy of Ophthalmology and Oto-Laryngology on the question of bringing about a higher standard of educational attainment for those who undertake ophthalmic practice as a specialty was reported to the San Francisco Meeting of the Section on Ophthalmology of the A. M. A. and was unanimously accepted and endorsed by that body.

The leading features of this plan are the establishment of a board to arrange, control and supervise examinations, to test the preparation of those who design to enter upon the special or exclusive practice of ophthalmology. This board is also to fix the requirements to be met by all candidates for examination. These requirements shall include graduation from a medical college of recognized good standing, at least two years before the examination; and such subsequent study of ophthalmology as may be required by the board. board is also authorized to prepare lists of medical schools, hospitals and private instructors recognized as competent to give the required instruction in ophthalmology. Each candidate reported as having successfully passed the required examinations is to receive a certificate or diploma setting forth that fact, but not conferring any academic degree. The board may appoint examiners from its own The advantages to be hoped for from such an examination are various. In the first place, the making of a clear distinction between those who have and those who have not made a proper preparation to practice ophthalmology is just as much needed as a clear distinction between those who have and those who have not prepared themselves to practice medicine. No one now claims that preparation to practice medicine implies a sufficient knowledge of modern ophthalmology to undertake the work which properly devolves on any oculist.

Information as to who may fairly be expected to give the best advice in a case of eve defect or disease is needed by the community. But it is almost as much needed by the medical profession. Physicians too often have no means, except personal observation and judgment, of finding out whether a member of the profession who claims to be prepared for special practice really has the needed educational qualifications. Even the oculist referring a patient, who is traveling or removing to some distant part of the country, is often at a loss to know to whom in that region he can send the patient, with a reasonable prospect of moderately good treatment. Patients often have had to travel hundreds of miles to some one known to their original adviser, because he did not know of one who could give skilled assistance, and who was close at hand. The standard of attainment that will be required by a single board known to all the ophthalmologists of America, will have a far more definite value than can the "M. D." or even membership in a local medical society, granted as these are by scores or hundreds of different eolloges or medical associations, with such enormously different standards.

membership, or from the medical profession outside of its membership. The examinations may be held in any city of the United States where good facilities can be obtained for conducting clinical and practical examinations. The expenses are to be met by examination fees, but the board is to serve without compensation.

<sup>\*</sup>Read at the Second Annual State Meeting of the Wisconsin Eye, Ear, Nose and Throat Specialists, Milwaukee, Oct. 8-9, 1915.

But the examination proposed will be of equal value in the influence it will exert in the direction of improving the standards and methods of institutions and individuals engaged in training men for ophthalmic practice, and in the support it will give to those who seek to raise these standards and improve these methods. In the past ophthalmic training in America has been sadly deficient in certain directions, notably in courses on the special anatomy and histology of the eye and on special pathology. Too many students of ophthalmology showed no interest in these branches-wanted rather to learn how to "refract" or get "a chance to operate". So it came about that the demand for "practical courses" being most common and insistent, were the ones commonly met. If a teacher started a course on physiologic optics, histology or pathology of the eye, so few were ready to take it that he became discouraged, gave it irregularly or discontinued it altogether. So it came about that when students who were ready to profit by such instruction came to seek it, they found it could not be obtained, or only at the cost of inconvenience and much unemployed time. Ophthalmic training in America has suffered greatly from But one of the first things the proposed board will have to do will be to lay down as preliminary requirements for such examinations, the courses that each candidate must show evidence of having taken, and from the list such branches as special anatomy, bacteriology and physiologic optics cannot be omitted. A demand for instruction in these branches will at once be created and will in turn develop the needed opportunities of such instruction.

Again such examinations will produce a healthy competition among institutions and teachers engaged in supplying ophthalmic instruction. Heretofore almost the only competition among them has been in the direction of securing students. Incidentally the offering of apparent advantages, in the way of clinical opportunities, showy apparatus and imposing hospital buildings, has entered into this competition. But thoroughness of work, improved methods, insistence on accuracy and devotion of sufficient time to necessary details have been largely neglected. The direct supervision of educational methods that such a board will have to put into operation will be felt in every department of ophthalmic teaching. These are but a few of the possibilities for good that lie in this movement for an Examining Board, controlled and supported

by the ophthalmologists of America through their already developed organizations. How that support may be given to the movement may well be a subject for careful consideration.

The recently passed law on Optometry must be mentioned and a few of its features discussed. The practice of optometry is defined as follows: "The employment of any means, other than the use of drugs, for the measurement of the powers of vision and the adaption of lenses for the aid thereof."

The board styled "The Wisconsin Board of Examiners in Optometry" consists of 5 members.

Every person before beginning to practice optometry in this state, after the passage of this act, shall pass an examination before said board of examiners, except as hereinafter provided. Said examination shall be confined to show such knowledge as is essential to the practice of optometry, and shall include normal and abnormal refractive, accommodative and muscular conditions and coordinations of the eye, and subjective and objective optometry, including the fitting of glasses, the principles of lens construction and frame adjusting, and such other subjects as may be deemed necessary.

Any person who has been admitted to practice optometry in any other state may be permitted to practice optometry in this state, in the discretion of the board, upon the payment of a registration fee of ten dollars and production of a certificate showing that he has passed an examination in such other state, and has actually practiced optometry therein for a term of two years.

No person shall be eligible to take the examination before said board unless he is at least twentyone years of age and shall have attended an optometry school for at least one year, a year's course to consist of not less than one thousand hours of actual instruction; or shall have served as assistant to a registered optometrist for at least two years and shall have registered with said board as an assistant optometrist at least two years before appearing for examination; provided, that all persons exempt shall have the privilege of taking such examination regardless of previous training. Said board is authorized and empowered to make such rules and regulations for conducting its examinations and for the standard of professional or special qualifications, as it may deem necessary.

Every person, firm or corporation, engaging in the practice of optometry shall cause to be displayed and kept in a conspicuous place, at the entrance of the place of business of such person, firm or corporation, the name of each and every person employed therein in the practice of optometry. Any person, firm or corporation violating the provisions of this subsection shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punished as hereinafter provided.

There is no mention made in the law as to how those registered shall style themselves so it is quite possible for them to assume the title of Doetor of this or that.

Practically no attention was paid to the protests sent to His Excellency the Governor by the Legislative committee of the State Society or those sent by the members of the society, except a letter from Mr. Chas. D. Stewart, Executive Secretary to the Governor who judging from the tenor of his letter seemed to be decidedly in favor of the bill.

The activity of the Committee on the Conservation of Vision, especially its Chairman, Dr. Frank Allport, is certainly deserving of praise. Weekly articles on ocular subjects in language understandable by the layman are being sent out from the Jeurnal of the A. M. A. Press in its Press Bulletin to Newspapers throughout the United States to be printed as extracts from the Journal of the A. M. A. There are now in print 20 Conservation of Vision pamphlets in popular language issued by the Council on Health and Public Instruction of the A. M. A. and can be obtained by writing the Editor of the Journal. It is suggested that these arc excellent pamphlets for doctors to keep in their offices and on their reading tables and for distribution. As is probably known one of the means of educating the public is by popular lectures on conservation of vision given throughout the state by those who are willing to do such work. The central committee has assigned an ophthalmologist in each state as State Manager and it is his duty to try and have as many lectures given during the year as possible. Having been selected as State Manager of Wisconsin I wish to ask your co-operation in this work. The popular lecture which has been used in different parts of the state is practically the same as that given by our secretary at the Oshkosh meeting last fall and is illustrated by means of lantern slides. Thru the kindness of the Wisconsin Association for the Blind the number and variety of slides has been greatly increased there being over 100 slides now available. These

are at the service of any one who wishes them and I again wish to urge the co-operation of the men present in helping out in this work. It has been found that the various Women's Clubs and Mother's Clubs are glad to co-operate with the doctor in securing an attendance to the lectures and manufacturers find that talks given before their employees aid greatly in carrying out the "safety first" work in regard to the eyes. The employees apparently looking at the matter in a different light when presented by a medical man in the shape of an illustrated talk than when the goggles are given them by the foreman and they are simply told to wear them. Education of the masses is always necessary before radical reforms can be hoped to take place.

### ADVANCES IN OTOLOGIC DIAGNOSIS.\*

BY S. J. KOPETZKY, M. D.,

NEW YORK.

In opening a discussion on fine points in the diagnosis of ear diseases, I am not unmindful of the fact that I am addressing a body of competent specialists. I am, therefore, privileged to take for granted a thorough working acquaintance with the diseases which I shall touch upon, with their wellknown symptomatology and the usual methods of therapy. What I desire to accentuate is perhaps some point or points which experience has taught me are of value toward more accurately making the diagnosis, and with this end in view I will start by drawing your attention to a factor in the suppurative ear diseases which is not often dwelt upon. I refer to the *nature* of the disease. An acute infection of the mastoid process is the same whether the patient is suffering from an acute purulent mastoiditis which follows in the wake of a severe prostrating attack of scarlet fever, or is the result of a sea-bath with the infection of the tympanic cavity started by the entrance of sea-water into the ear. That is, a miscroscopic examination of a section taken fom two such eases might conceivably present identical pictures. Even the micro-organism found in each might prove identical. Does any

<sup>\*</sup>Address delivered at the Second Annual State Meeting of Wisconsin Eye, Ear, Nose and Throat Specialists, Milwaukee, Oct. 8-9, 1915.

one doubt that the nature of the mastoiditis in these two cases differs? A cross section of the labyrinthine channels conecivably might present identical unicroscopic sections from two cases of infective labyrinthitis—one from a traumatic infection, the result of technical errors incurred during the performance of a radical mastoid operation, and the other from a case of purulent labyrinthitis which is the sequela of a cholesteatomatous involvement of the middle ear spaces. Do you think that the nature of the labyrinthitides is the same in both these cases?

Two children both have discharging ears for many years. One has just undergone and emerged from pneumonia. The other has a slight cold, and both present upon admission the signs and symptoms of an acute exacerbation of the chronic condition. Are they alike in nature? To cite the instances is to anticipate the answers. The nature of the disease must be taken into account when making fine diagnosis. This factor it is which determines the course of the symptomatology, and where a debilitating disease or condition precedes the onset of the given lesion it enhances the gravity of that condition, makes the prognosis more grave, and, other things being equal, it indicates an earlier resort to operative measures.

Much has been written about chronic otorrhoea and its curc. Operations are devised and reported Successes and failures are tabulated, and recommendations based upon such reports are daily happenings in our literature. A new system of therapy appears, for example vaccine therapy, and reports follow reports on its success and upon its lack of success. Yet how many reports are in existence wherein the observer finely diagnosticates the cases he submits as a basis of his work. Permit that I call attention to the fact that otitis media purulenta chronica is a statement of a condition common to a number of car lesions, and is not a diagnosis of a disease. Bone caries, bone neerosis, cholesteatomata in the tympanic cavity and adnexa, chronic suppuration of the tympanic mucosa, and new growths are lesions every one of which is accompanied with a chronically discharging car. And in this discharge will be found microscopic flora. Would it not clear the situation were we to hear reports upon surgical procedures, upon vaccinc therapy, etc., in groups of such diagnostic exactitude that an idea might be obtainable as to the particular set of lesions which yield to the suggested therapy? Can one expect the ingrowth of cholesteatomata to be stopped and the bone absorption which insures from such an ingrowth to be cured by the injection of any amount of dead bacteria into the body of the patient? Yet I have seen report follow report where just such things are noted.

Can a bone caries of the tympanic cavity yield to a closure of the Eustachian tube by the method suggested by Yankauer? What rationale underlies such reports?

True differentiation is difficult. But an attempt is possible. Even exact otoseopic studies and description help toward the grouping of the cases with cronic otorrhoea as a common factor. For example a perforation or defect in the membrana tympani which is marginal in situation, which impinges upon and includes the bony structure of the annulus tympanicus manifestly is a bone lesion. The results of bone destruction are capable of detection by microscopic and perhaps chemical examination of the ear discharge. The nature of the disease in which the ear lesion had its origin has a bearing on the question, and thus in a measure differentiation is possible.

Just as long as cases of chronic suppuration of the tympanic mucosa are submitted to radical mastoid surgery, just that long will the radical mastoid operation in such cases be recorded as failures. It is impossible to eradicate all of the diseased mucous membrane in the region of the tympanic cavity, and after operation this membrane continues to discharge its detritus and cell elements even as before operation, and the surgical measure falls into disrepute as a failure, whereas unsuitable cases have been subjected to its technique.

Yesterday, during the meeting of the American Academy of Ophthalmology and Oto-Laryngology, I reported upon a case of labyrinthitis, wherein I stated that I had observed the course of the labyrinthine invasion and had watched and seen the labyrinth die. Then after an interval, I had subjected the patient who was suffering from a chonic mastoiditis caused by a cholesteatoma in the middle car to a radical mastoid operation, and at the end of three weeks the patient suddenly developed meningitis complicated by pneumonia and sinus thrombosis and died. Some of my colleagues took me to task for not removing the dead labyrinth at the time of my radical mastoid operation. What is

meant by a dead labyrinth? When the labyrinth refuses to functionate it is dead. That is to say, when the delicate membranous structure within the hard bony capsule is subjected to too much pressure, sometimes its activity is permanently lost, and often only temporarily gone. Does that necessarily mean that I left dead bone in situ? It is evident that here, too, a loose use of terms causes the confusion. My colleagues and I would be agreed were we using identical terms for the description of the lesion we talked about. In the case in question there was no evidence of death in the bone of the labyrinthine capsule. There were fistulae, but the membranous labyrinth had responded to a fistula test—therefore, it was not out of function, and to remove all the disease found was all that was justified.

As we have no means of differentiation between a serous and a purulent invasion of the labyrinthine channels, conservatism based on previously successful results from identical cases is the order of the day. And let me remark in passing that I do not believe that constitutional symptoms can be aroused from the small amount of pus which the labyrinthine channels are capable of harboring. When constitutional symptoms supervene, the arachnoid is being heard from and a lumbar puncture is in order to determine the extent of the involvement. This quite naturally brings up the significance of lumbar puncture findings. I have had no experience which leads me to change my views as to the great value of the complete examination of the spinal fluid. This should consist in a evtologic, chemical and bacterial examination, and the chemistry and cytology of the fluid gives the earliest answer to the mooted question as to whether or not the cerebro-spinal system is invaded. In regard to lumbar puncture, and in regard to the functional tests of the labyrinthine function, I desire to emphasize a point which is not common knowledge. A general physician would not be satisfied with one complete examination of the chest to establish the diagnosis of a pneumonia, but he would make repeated physical examinations to determine what changes, if any, what progress, if any, and what retrogressions, if any, were taking place in the lesion in the lungs. How many labyrinthine cases are observed in like manner? Is it not a fact that in the great majority of cases reported in the literature, only one functional examination (the one which permitted the diagnosis) is recorded?

But where repeated examinations are made, there only the progress of the lesion is noted. One thus is enabled to reconstruct the elements at work within the labyrinthine channels, and note how they progressively advance from the stage where the still functionating end-organ is excessively irritated, to the time when function ceases and the unbalanced impulses from the healthy side are made apparent, and then one notes the cessation of advancement, and finally the compensation reactions. Where repeated labyrinthine tests are the order of the day, fine diagnostic points are made, in addition to the acquisition of a truer knowledge of labyrinthine conditions.

What is true of repeated labyrinthine examinations is surely true of the examination of the lumbar puncture fluid, and of the blood in cases suspected of sinus thrombosis. To take a single negative report on blood culture, and regard its significance as of any value is apt to lead to mistaken diagnosis and cause blood culture examinations to fall into disrepute. Only repeated examinations possess value and significance. When the second and third culture taken the second and third day after the sinus has been opened and the jugular ligated or resected give continued positive findings of streptococci in equal or increasing numbers of colonies present, then secondary lesions in the heart, joints or muscles are the rule. Where the later culture shows decreasing numbers of colonies present, or the blood is reported as clear, then an uncomplicated outcome may confidently be expected.

To go into the discussion of the localization of brain abscess would be to take up your entire time. Co-operative work with the neurologist is here in order, and repeated examinations necessary. In meningeal cases, of which I shall forbear to dwell, the separation of the groups where increased intracranial pressure symptoms predominate in the clinical picture, from the groups where poison and prostration symptoms are in the foreground, may help toward instituting successful therapy.

In conclusion I must add, and by way of apology, that in a general review of so broad a field my remarks must necessarily be disconnected and disjointed. We might profitably dwell at length on any one of the points raised, but if I have succeeded in drawing attention to a few high marks, and elicited a discussion on them, I will feel that my efforts are not unavailing.

# THE INFLUENCE OF MANOMETRIC PRESSURE UPON THE MIDDLE EAR.\*

BY HENRY B. HITZ, M. D.,

### MILWAUKEE.

My intention is not to offer anything materially new but to view a subject of supreme importance from an angle which has not, as far as I have been able to ascertain, received the attention that it merits. In the study of the physiology of the eustachian tube, Politzer in 1860 in the laboratory of Ludwig, made experiments upon the variation of air pressure in the middle ear by a simple type of fluid manometer. This apparatus consisted of a small rubber plug, perforated and connected with a bent glass tube containing a small amount of colored fluid. The plug was placed in the external ear and by means of a catheter in the eustachian tube, the ear was inflated and the variations in the air pressure were noted—also those that occurred throughout the act of swallowing with the nose free and the nose occluded.

In later experiments by the same author, it was clearly shown that variations in pressure not only affected the drum but necessarily affected the round and oval windows to a certain degree. In a body of men of this character, it would be simply futile and a waste of valuable time to dwell at length upon the necessity of a free, patulous, ventilating mechanism for the middle ear. It is also perhaps unnecessary to call attention to the fact that this free ventilating mechanism consists not only of a normal eustachian tube, but also of a normal nose. The question must have occurred to the minds of numerous investigators on many occasions of, "Why a middle ear." It may have been answered many times. The curious thing that has struck me in looking up the literature upon the subject is, that practically none of the text books touch upon the matter from the standpoint of comparative anatomy. Approaching the subject from this direction, in the scale of animal existence, t one finds the beginnings of the middle ear in the amphibia, the tympanum being present in all birds and practically all reptiles, except snakes and hatteria, the crocodile having a very complicated

tympanic cavity. In the mammalia and higher order of animal life, it is found to be constant. In other words all of the air-breathing animals are endowed with this organ, while the class of animal life that obtains oxygen through other media than air, alone is exempt: therefore, it would seem to be unnecessary for the hearing of sound in fluid media to possess a middle ear, but while not entirely essential for hearing, it is at least essential in airbreathing animals, to good hearing. By this process of reasoning, I have asked myself a great many times if its prime function were not that of a shock-absorber whereby the air-borne sound waves of varying amplitude reach the delicate organs of the inner ear minus the accompanying element of shock.

From another point of view, the middle ear would seem to have many of the characteristics of the aneroid barometer, the membrani tympani and the membrani tympani secundaria representing the flexible diaphragms of the barometer. The analogy differs from the aneroid only in the fact that the middle ear possesses a ventilating mechanism, namely the eustachian tube. Inasmuch as the normal and proper balance of pressure behind and without the imperforate drum is alone conducive, in the normal ear, to good hearing, and inasmuch as there is a constant variation in barometric pressure, it is necessary for the frequent opening and closing of the eustachian tube to maintain this balance. The most frequent element of obstruction to the proper ventilation of the middle car is some condition of occlusion in the naso-pharnygeal space, or in the eustachian tube itself. In the perfectly normal state with intact middle ear, eustachian tube, naso-pharynx and nose, ventilation takes place somewhat in the following manner. During the act of swallowing, the soft palate first rises up like the piston of an engine, displacing the air behind the nose. In its downward stroke, the air is drawn in freely through the nostrils. As gaseous pressure always moves from the denser to the less dense, the proper readjustment of pressure in the middle ear occurs at the moment of the opening of the eustachian tube, towards the end of the piston stroke.

Per contra. When there is nasal occlusion whether it be chronic or acute, of short or long duration, the act of swallowing at the moment that this occlusion exists, results in the creation of lowered air tension behind the nose which is communicated to the middle ear during the final act of

<sup>\*</sup>Read at the Second Annual Meeting of the Wisconson Eye, Ear, Nose and Throat Specialists Milwaukee, Oct. 8-9, 1915.

<sup>+</sup>Wiedersheim, Comparative Anatomy, pp. 220-226.

tubal opening, causing a rarefaction of the air within the middle ear cavity. This process of rarefaction behind the nose may be only momentary but occurs at the moment when it is apt to do the most The sensation of oppression in the ear resulting thereby, has been induced by the nasal occlusion, which in itself is a discomfort resented by the patient, who immediately tries to overcome the condition by a violent blowing of the nose. As the air cannot be expelled through a stopped up nose any more readily than it was taken in, it naturally leads to a reversal of the previous state viz.: to the compression of air behind the nose which in the same way seeks the line of least resistance; i. e. through the tubes into the middle ear, causing a state of increased atmospheric tension, the drum being violently bulged outward. This may again be overcome by the act of swallowing with the nose free and for the time being, a return to the normal state of affairs. The point that I would like to bring out here with heavy emphasis is that it is this condition of frequent excessive variation of atmospheric tension, oftentimes beginning in the early period of life and continuing day after day for years, unappreciated by the individual except at intervals, and then only by a sense of minor discomfort, that will inevitably lead to radical tissue change in the ear. I believe it to be one of the largest factors in the cause of so-called "chronic dry catarrh" of the middle ear. The process itself is practically a cupping one involving the mucous lining of the naso-pharynx, posterior choanae, the eustachian tube and the tympanic cavity. It stands to reason that the effect of momentary periods of diminished air pressure will be small, but where repeated often, and allowed to exist for any length of time (i. e., during the hours of sleep), it must result in a slight lowgrade congestion, and to tissue change as an ultimate result. The fact also remains that the pressure evolved by the act of blowing with violence will bring about in the course of time, a stretching and laxness of the eustachian tube causing a development of a condition of too easy ventilation of the ear and therefor greater opportunity for the introduction of sepsis. That this occurs more or less frequently even where no sepsis has resulted, is shown by the frequent complaint of autophony. In many of these cases the laxness of the drum itself is apparent, and is in itself evidence of the production of excessive negative or positive pressure, the middle or elastic coat of the drum having

given way, much as a sail bellies after being subjected to persistent wind pressure. Naturally the feature of this condition is observable mostly in the drum membrane which is easy of observation. The same reasoning would argue that this force must affect not only the flexible drum surfaces, but the entire lining of the middle ear. The part that is flexible yields to this pressure, the part that is inflexible cannot yield, on account of its hard walls. There results the development of a state of congestion on the one hand, if it be negative pressure (rarefaction) and anemia on the other hand if it be excessive air pressure. This latter is naturally followed upon its correction by a certain amount of congestive irritation. Now the deductions that seem to me to be clear are that the constant frequent recurrence of such a process enduring for irregular intervals of time, and in the sum total for considerable periods, must of necessity lead to round-celled infiltration more marked along the vascular areas, and the formation of scar bands and ultimately to a hardening process akin to that taking place in interstitial nephritis or interstitial hepatitis. There is another feature which should not be ignored and that is where the eustachian tube has become too patulous or free, there is increased danger of the entrance of septic material from the nasopharynx and the starting up in this way of tubal inflammation, the effect of which is to cause more rapidly the changes due to the negative pressure in the middle ear. The opportunity has occurred to me a great many times to observe conditions which I have been describing, where the most careful, painstaking investigation has failed to develop any possible explanation for a bilateral deafness, in which the onset has been slow and gradual without the appreciation on the part of the patient of the constant decrease in hearing. Test for hearing shows a deviation from the normal of 30" by the watch to 50 or 75% reduction with a markedly negative Rinne; with Weber stronger on the deafer side, and with little or no structural change observable in the drum, excepting with the Siegel Otoscope, when it is then seen to be loose. or to have more than the ordinary latitude of movement. When one finds such a case in an otherwise perfectly normal individual, with no history of previous illness or family dyscrasia, it is sometimes hard to explain the development of the condition. Examination of the nose may or may not show some degree of stenosis but not apparently sufficient to explain the situation. If the individual is

of a nervous type of character, uses his handkerchief a great deal or is constantly clearing his throat, inquiry will invariably be satisfied by questioning how often he feels discomfort in his ears while blowing his nose. As I have often said to patients suffering with a condition such as I have been describing, no treatment of 5 or 10 minutes duration in a doctor's office is going to offset the physical abuse of the rest of the 24 hours. That all I can do for the individual is to point out to him the necessity for constant unremitting care in the avoidance of the injury done his cars by violent nose blowing. The delicate structure of the apparatus of the middle ear would indicate that nature never intended it to withstand excessive degrees of atmospheric tension, and that the constant upsetting of the normal balance, must of necessity lead to serious disturbance; that this disturbance is evidenced in the individual generally in two ways, by a steady diminution of hearing, due to tissue changes, and usually by the onset of adventitious sounds, unquestionably due to tensional strains from developing scar bands. I tell these patients that it is not one act of violence that necessarily causes harm, but that it is the constant dropping of water that wears a hole in the rock, it is the accumulative results of long periods of abuse; that if they would get results they must entirely change their habits; and if there be present stenoses in the nose, they should be corrected by operative measures but that irrespective of these stenoses themselves, the habits engendered by transitory colds, persisting long after the colds have themselves been dissipated, must be corrected. I further warn them that not only do they run the risk of deafness due to the effect as herein described, but the additional possibility of serious acute infection.

The class of deafness that I bring up for consideration at the present moment is perhaps the commonest form of trouble of this type that we meet with in our daily practice. Only those in the early years of life seen to be entirely exempt and it commonly appears in the average run of cases somewhere along the middle period of life, say from 30 to 50 years of age, as from its cumulative character would be the case. Varying in degree and intensity in individual cases, it still presents certain well-marked phenomena which stamp it unmistakably of this character. Certainly the larger number of cases show little evidence of the

history of past disease that may be considered a factor in the case. Sometimes the symptoms appear shortly following upon the heels of some acute nasal process, more often, however, the individual has suffered little or no material discomfort prior to the time of consultation on account of his hearing. Often he will come in and complain of sudden deafness, the recognition alone of which has been sudden, and possibly brought about by the advice of some of his intimates to consult a doctor on account of his hearing. The result of examination shows a type of deafness which, from its nature and character, must have been of gradual development and long duration. The functional test of this type of deafness is, in the main, characterized by negative Rinne, marked reduction in the watch test below the normal, and Weber laterallised to the affected side, there being no evidence of recent acute disease. There is generally no material difference in the duration of the low, middle and high-pitched fork, there may or may not be certain adventitious noises. About the only discomfort the patient complains of is a feeling of oppression in the ears, sometimes relieved by the act of swallowing. Occasionally the individual will give a pretty clear history of when the process began, more often, however, the loss of hearing has been so gradual and the discomfort so slight that it has practically passed unnoticed. Examination of the drum in this case generally shows it to be more or less relaxed or slightly changed in texture and color with an abnormal degree of mobility and without any apparent ossicular fixation or loss of motion.

Careful test will show in the earlier stages a eustachian tube of abnormal freedom, and oftentimes, an absence upon inflation of the normal sound heard through the diagnostic tube, giving rise to the impression that no inflation has occurred. An occular inspection of the drum however usually shows that it is violently bulged out. Explanation of this last condition is clear in many instances if one takes the pains to deflate the ear, and then with the thumb and forefinger over the Politzer bag, watch the drum during inflation and note the drum cavity fill with air. I believe many cases have been put down for stenosis of the eustachian tube because of the failure of the physician to recognize the true state of affairs, for I have been and am constantly on the alert for eustachian stenosis, and rarely find it, and then only

in advanced types of cases or where there have been extensive ulcerative lesions in the nasopharynx.

One of the most important phases in the consideration of these cases is that of the early recognition of the process. When a man's leg has been amputated by a train, it is too late to warn him against being careless. It is before the accident happens that steps should be taken to avoid such contingencies. The same thing applies in these eases, of what might be called incipient deafness of this type. I was strongly reminded of this a few days ago when a young woman of 23 called upon me complaining of persistent discomfort in her ears. Functional test for hearing showed no apparent degree of deafness. Examination revealed a certain amount of intumescence of the nasal mucous membrance and strongly retracted ear drums. The texture and character of the drums seemed to be normal and the ears inflated very readily with a slight pressure of the Politzer bag. There were no noises complained of but a sense of oppression in the ears most marked upon arising in the morning. She did not think that she breathed through her month at night or snored, but complained of dry mouth in the mornings at times.

The symptoms are trivial enough at the outset if the conditions are recognized and the patient taught to take the proper care and at the same time steps are taken to relieve the nasal stenosis. If permitted to go on for an indefinite length of time, such a case will develop tissue changes which will ultimately seriously damage the hearing.

My own method of treating these cases is to take plenty of time to explain in as simple a manner as possible, the mechanism of the structures involved and the nature of the forces at work. I try to impress the patient with the necessity for constant, unremitting care as regards his habits, insisting that, it is not so much the abnormal conditions in the nose that is doing the damage, but the bad habits engendered by this condition. strongly advise the correction of the nasal abnormalities but insist that this will not help unless the habits are likewise changed. I purposely avoid the use of the Politzer bag or catheter excepting at rare intervals and then with circumspection. I absolutely prohibit Vansalva method of inflation as being directly contra-indicated and injurious. I have in my files many cases showing the value of

this procedure but for the purpose of illustration will mention but the following:

Mrs. W., age 52, for two years had noticed a steady diminution of hearing with occasional attacks of tinnitus. Her general health had been excellent and she could not understand the reason for the steady decline of hearing. During this period she had consulted three well known specialists who treated her ears in the usual manner with regular Politzerization and occasional massage, but in no wise checking the downward trend. When she first consulted me her hearing was reduced to 4/30 and 5/30. Rinne was strongly negative. The drums were loose and bellied. She had been taught the Vansalva method of inflation and constantly practiced it for the temporary relief it gave. There was no apparent nasal obstruction, though she had the habit of violent nose-blowing. Considerable time was spent in setting her right as regards the situation and she was advised to have no treatment. Nearly a year elapsed before I saw her again when one day she walked in and said: "I have religiously followed your advice and while I can't say that I am cured, I am at least no worse." Examination of her ears showed an improvement to 10/30 and 12/30 respectively. She remarked from the absence of discomfort she had forgotten she had ears.

It is not the avoidance of use of the ears but the avoidance of constant abuse that brings the results. Where serious loss of hearing has been the cumulative result of years of abuse, we cannot expect the complete restoration of hearing. We can however check the downward trend in many cases, and if the process has not advanced too far, can often secure sufficient improvement to justify the view that we have been on the right track, and this too without large financial cost to the patient.

# DIAGNOSIS OF INCIPIENT MENTAL DISEASE.\*

BY FLOYD M. APLIN, M. D.,

WAUKESHA.

The entire diagnostic field in mental disease is so large as to be distinctly beyond the limitation of one brief paper. I have elected therefore for con-

<sup>\*</sup>Read before the Marathon County Medical Society, Wausau, Wis., Oct. 11, 1915.

sideration here but a small portion of it, that part of it in which the average practitioner has to me appeared least proficient and most frequently remiss. I have in view certain diagnostic managements of incipient cases of mental disorder. may be considered as embracing the onset of original attacks, the beginning of recurrences as well as the clinical conditions obtaining in some mild mental illness throughout their entire course. All physicians whether in general practice or in some special line of medical endeavor must necessarily meet and ofttimes treat eases of those mentally diseased. Usually they meet the patient early before the classic symptom complex has had sufficient time completely to develop. Although invested with grave possibilities mild and developmental stages present deceptive diagnostic features. Frequently there appears to be a good deal of reluctance on the part of medical men in attempting diagnoses in disorders of the nervous system involving personality. For what reason I eannot definitely say as it is highly important that this should be attempted. True a positive diagnosis may not be possible when the case first comes under observation but a fairly accurate provisional diagnosis can and should be made. Without this being done the physician not only cannot treat the ease intelligently but the prognosis and political management fall very short of ideal. It is hardly suffieient to decide that a woman has nervous prostration or that a man is mentally effected. It matters not whether outside assistance is available or not, it should be borne in mind that a family strongly tends to look to the home physician for guidance in such problems and his advice not seldom ontweighs any and all others. Owing to this fact alone it is important that he get started along correct lines early.

In the first place let us define what we mean by mental disease. We mean any primary disturbance of the nervous system involving a distinct change of personality. Its progressive end is that condition commonly known as insanity in which the conduct of the patient has noticeably changed his relation to society and deviated his behaviour from that common to himself and implies some menace to the body politic. All cases of insanity have mental disease but not all people with mental disease can be adjudged insane.

In psychiatry as in other branches of medicine, there exist borderland and unusual cases that still give rise to discussion as to elassification. Ultra-

scientific men probably will continue to debate over these so-ealled mixed or borderland eases for some time to come but the great mass of problems is relatively easily disposed of as regards diagnosis. In the very early stages I know of no unfailing points for diagnosis. All neurasthenoid and hysteroid groups of symptoms should be serutinized carefully. Any such symptom group merits the same consideration from the standpoint of psychiatry that abdominal pain receives from surgery, though not all abdominal pain ultimately leads to a so-called surgical condition. It is a matter of common observation, however, that as our store of medical learning increases our number of cases of neurasthenia and hysteria decrease.

Given a patient with some change in personality, before we decide that he is suffering from incipient or mild mental disease we should make a pretty careful survey of the situation in order properly to eliminate other things. A man may be said to be wild with the toothache or delirious from fever. This is not properly regarded as mental disease. On the other hand, too much eredence must not be given to the all too prevalent idea that most disorders of the nervous system are reflex in origin and therefore every anatomical point that does not come up to standard in function and position must be regarded as playing an offending part in this reflex activity. The special cells in the nervous system should be accorded the same latitude in becoming primarily disordered as is accorded to liver cells or those of any other tissue. At this point it may be profitable to state that it is rather easier to make a positive diagnosis of mental disease based on a plus group of symptoms than it is to eliminate it because of insufficient findings. I have here in view certain combinations that might be termed pseudo-psychoses. Many of the more common symptoms found in on-coming disorders of the mind are discovered singly or in small groups under other but suspicious circumstances. Many patients of high intelligence but of psychopathic histories know this and particularly if they have an unfortunate amount of knowledge. They confront one with such problems as, "I have headache daily and am irritable and sensitive. Do not people who lose their minds feel thus? Or, I have insomnia and am blue and unhappy without good cause. May this not lead to insanity? Or, I know I have had syphilis and now I have indigestion which I never had before. Do you think I am getting paresis?" Possibly to such they add a few

parallel things. To say that these patients are neurasthenics would ofttimes be maligning the patient. To diagnose mental disease would be a greater injustice to them. They have been examined carefully and except for their well founded complaints they appear in good condition. How shall we dispose of them? I think best by analysis of their mental processes on the one hand and by investigating their hygiene on the other. patients as a class reason forcefully and well. The true neurasthenic reasons excessively but freely. The victim of true mental disease reasons not at all on the subject on which he may be morbid. This is just the point. There is a loophole in their reasoning, or if severe enough they are said to have lost their reason. A patient with well rounded ability to reason at all times cannot be looked upon with serious suspicion as regards his mentality. But let us remember that it must be at all times, for changes in mental symptoms are susceptible to great vacillations within 24 hours, just as are the pulse, temperature and respiration.

Back of these cases of what I term pseudopsychoses will be invariably found a lot of bad hygiene. Their insomnia they bring on by long continued breaking of rest or by the pernicious habit of late reading in bed and kindred present day indiscretions. People often tell me they have read themselves to sleep at night for years. It would be better to say they had been going to sleep at night for years in spite of their night reading. Obscure over-exhaustion may account for headache, irritability, malaise and depression. Many have deceived themselves by the old adage that a change is a rest. This is true only in a limited sense and cannot be demonstrated as true in experimental physics. Further it should be borne in mind that over-exhaustion does not necessarily mean overwork but overwear from any cause whatsoever. Persons of no demonstrable economic value to the world may suffer from over-exhaustion. These people may give themselves up entirely to pleasureseeking and society. They may be the victims of bad sexual hygiene or be unhappy and constantly irritated in their home life. These patients cannot be lightly disposed of for they are numbered among our most responsible clientele, but by close observation they can as a rule be easily classified.

Having decided from our history and general physical examination that our patient's symptoms are essentially and primarily mental we should further endeavor to classify him for purposes of medical and economic management if not to satisfy our scientific interests. In my own early observation of suspected cases of mental disease, there are four major points which I first consider. I think of them in much the same spirit as a woodsman would the four points of a compass. The first of these is: Is the patient above normal in spirits; is he over-happy, unwarrantedly joyful, unduly optimistic, lowered in his religious habits, bold in manner, free with money and remiss in home relations. There may be nothing expressly diagnostic about these features but they indicate the trend of mental effort and suggest simple mania, the maniac depressive state, dementia praecox and perhaps paresis. One would think it would be as easy to differentiate a maniacal condition from a depressed condition as it is to differentiate fever from subnormal temperature but it is not so. Not infrequently are restless and disturbed phases of a depressed condition of temperament designated as mania and treated accordingly. I have particularly in mind the administration of drugs belonging distinctly to the cerebral depressants, chief among which are bromides. Obviously the condition must necessarily be aggravated by their continued use. Restlessness and loud talking do not necessarily mean mania. Physical and mental exhilarations on the other hand are very distinctive signs even though present in but slight degree. Modifications in pulse, temperature, respiration, leucocytosis and blood pressure are often found in acute mental disturbances but can hardly be looked upon as being of diagnostic value.

The second major question to be asked is, if the patient is not above normal in spirits, is he below the average. Is he unduly pessimistic, inordinately close financially, over-zealous religiously, selfaccusative, frightened in manner, potentially suicidal. These symptoms do not actually spell any disease but they show the trend of abnormal personality and make one think of a melancholia of known etiological origin, the depressed phase of a maniac depressive attack, senile changes or paresis. On first consideration it would seem that a well marked condition of mental depression would be easy of recognition. The fact is, however, that where there is a good deal of inhibition and tendency to be stuporous the condition is often confused with bona fide dementia. Further, it must not be forgotten that a patient may be melancholy to the point of active suicide and yet wear a smiling face or be much given to buffoonery. I

well know one man who in the melancholy phases of a maniac depressive psychosis is a capital story teller and entertaining, but when well is dull and uninteresting. In connection with depressed phases of mind the gastro-intestinal tract deserves special mention. Loss of appetite with resulting loss of weight are as constant findings in depressed mental states as they are in pulmonary tuberculosis. So frequently is digestion itself disturbed as to have given rise in earlier days to the auto-intoxication theory for the cause of maniac depressive insanity. For diagnostic purposes in differentiating between a mild maniacal and a mild melancholic condition three comparisons are as valuable as they are interesting. They are financial, religious and domestic. A man melancholic thinks a dollar is worth more than it is. One excited undervalues a dollar. A man depressed wants others to save him spiritually. A man excited preaches salvation to others. A man sub-normal in spirits has a higher regard for his family ties than the average man. A man excited cares less than usual for home relations.

The next major question is: What about peculiar ideas if any are present? These may exist without mental exaltation or mental depression but usually are found in both changes of spirits if the change is at all marked. The most important point to determine in connection with delusional ideas is their degree of fixation and detail of systematization. A firmly fixed, well outlined idea without apparent excitement or depression is about as unfavorable a symptom in mental disease as one can encounter and strongly suggests paranoia. It may be well to state here that the tone of conversation including the projection of erroneous ideas may be alone quite sufficient to determine whether the individual is above or below par in spirits. I have in mind the fact that a man may show more deviation from the normal in extended conversation or in correspondence than he shows on physical examination. At this diagnostic angle my feeling is that the greatest difficulty is encountered in differentiating the exalted ideas of mania and paresis from the same type of delusions in paranoia. The same may be said of persecutory ideas. In paranoia it is a well known fact that delusions feature the illness but in the beginning not more than one well defined erroneous idea may exist. False impressions and ideas that feature excitements, depressions and deteriorated states strongly tend to multiplicity and come and go with a considerable degree of rapidity. Therefore, before provisionally attempting to dispose of this group of symptoms presented by any case of mental disorder, there should be an endeavor to determine whether the peculiar ideas are the essence of the illness or but an accessory part of it.

The fourth and last point in my diagnostic compass is embodied in the question: Does there exist or is there likely to occur a falling off of mental capacity; in other words, is there a dementia? The word dementia as I use it here is not the press use which generally conveys the idea of a marked active psychosis. The most common usage of this word simply indicates a mental enfeeblement or deterioration. This may require a comparative study of the personality which obtained some time previously. Changes in this direction are rather early evidenced by a lack of personal care-taking and by a subsidence of the general interest of the individual. On both points the patient drops below a level that cannot be accounted for by any other symptom or group of symptoms present. Depending upon the age of the individual this state will always suggest dementia praecox, paresis or senile dementia. In considering the symptom dementia we naturally eliminate the originally feeble minded so far as possible by means of the history. I know of no way of demonstrating a moderate degree of dementia as satisfactorily as by some educational means. This may be done unknown to the patient by the conversational method. He may be given some informal written test, or if a record were for some reason desired, some formal test such as is applied to Morons for classification. If such as the foregoing cannot be applied the dementia must be an advanced one or the patient is suffering from a narcosis, or some additional train of mental symptoms is present.

Now that we have determined the general trend and direction of a given patient's symptoms, further effort should be made to identify the symptom complex presented with some known clinical entity found in present day classification. A few principal headings include the vast majority of cases. Rather intuitively one first seeks that group of psychoses commonly considered as those of known etiological origin. These of course in turn may be subdivided almost indefinitely. The toxemias here predominate. Among those of external origin may be mentioned alcohol, chloral hydrate, opium and so on almost indeterminately; of internal origin pregnancy, lactation, and dis-

turbances of internal secretions especially the thyroid gland. This group may include disturbances resulting from infection and prolonged exhaustion. It is generally conceded that a psychic shock in neuropathic subjects can produce a psychosis. Under this heading may be mentioned traumatic melancholia, pre- and post-nuptial disturbances. I know of but one thing that this large and protean group have in common and that is that with little effort one can point out with great satisfaction an undoubted cause. True there may be contributing influences, but for practical purposes and as a working basis they may be considered to be of known origin. I feel that the industrial life and personal habits of the individual cannot be too carefully scrutinized for a reason for the affliction. A man constantly handling alcoholic liquors who suddenly loses his reason probably has an alcoholic psychosis but I have seen such a case missed. An individual who inordinately used tobacco and developed persecutory ideas and was as a consequence for a time thought to have paranoia became entirely relieved in a few days after dropping tobacco. Nine times out of ten where a woman has a psychosis and a child under one year, the latter has had a bearing on the former, but at this junction it may be important to remember that a woman with a mild psychosis may conceive and bear children and as a result ofttimes the psychosis is intensified. Further, in connection with this group of cases, there is a common error in the other direction, and that is that the alleged cause is too far-fetched from sheer nature or point of time. A fall from a horse in adolescence long since passed or sunstroke in a former decade will hardly do. This brings up another question, namely, the fact that a number of families are prone to bring forward sufficient etiologic material to cover up all inherent defects in family predisposition to disorders of the nervous system. This we should be watchful for. There is a strong tendency toward concealment on the part of members of families giving personal histories of supposed mental patients. It is parallel to that practiced by patients suffering from venereal disease. The more closely associated the physician is with the family, the more likely is he to be deceived in this direction. In attempting to arrive at a diagnosis of a mild or incipient mental condition, one that is understood to be due to demonstrable etiologic cause, there is one caution which I consider important and feel that it cannot be observed too closely as it may strongly influence

future management of the case. It is this, that we do not condone any known harmful act or habit or consider any material thing or line of conduct as above question or reproach. If this is observed no one will have anything to retract before recovery occurs, and the necessity of this caution seems to lie in the fact that the reaction to many agents frequently seems modified and often intensified in the presence of mental disease. Then too the patient's degree of indulgence may recently have changed. A man developing mental disease may begin to use tobacco as an article of diet where formerly he only chewed or smoked it. The investigation and removal of all possible disturbing factors may not only confirm one's diagnosis but go a long way toward effecting a cure. My impression is that mental disturbances belonging to this so-called etiologic factor group are earlier and more vigorously dealt with than those which grow in a large part from inherent defect.

One of the earliest occurring mental disorders and considered of unknown internal origin is dementia praecox. In point of numbers it makes up a large part of cases met with in practice. In many instances its diagnosis is easy. In many others owing to its insidious onset and mild and vague symptoms it is hard. Its limitations as regards classification are still a little uncertain. As a general proposition it can simulate almost any other type of mental disorder, but the thing always to be remembered is that it is an involution disease essentially of early life. It occurs to me that the most characteristic and constant finding is the rather rapidly developing dementia occurring out of all proportion to the other manifestations. True it is that in many instances this symptom may require a time element for its detection and yet it is the essence of the disorder and if carefully searched for can be demonstrated in more incipient cases than is generally supposed. Probably on account of this dementia more than any other symptom, patients do poor work in school for some time before anything in the nature of illness is recognized. I have never met a case of precocious dementia that displayed any noteworthy degree of mentality after the onset of the attack. Symptoms of a sex character should be looked upon as growing out of early dementia and physical involution. Especially noteworthy is suppression of menses in the female and masturbation and other perversions in both sexes. Fond parents and some physicians regard these things as etiologic but rather are they

to be considered with a proper background as early symptoms of dementia praccox. Most authorities seem to agree that an inherent defect in the individual has much to do with the origin of the trouble. Bearing out this hypothesis I cannot help feeling that text books and teachers have not dwelt sufficiently upon certain abnormal developmental points. I have in mind the so-called stigmata of degeneracy or conversely or coincidentally considerable evidence of precocity. Where the foregoing are much in evidence, even mild changes in conduct and personality may well suggest dementia praecox. From a diagnostic point of view impulsive tendencies are thought by all to be of considerable value. It might well be called volcanic activity and is seen both early and relatively late in the disease. Indeed, an impulsive change of program is characteristic of all incipient dementias whether precocious, paretic or senile. To be of diagnostic value these outbursts of violence must occur on a fairly well ordered background. Another peculiar trait that beginning cases of dementia praecox have is a strange longing to be free. It occurs early but is not often openly complained of by them. Owing to its presence they cannot be located satisfactorily. If at home, they want to leave; if away, they want to return. Their desire to be free almost amounts to air hunger. If the features just enumerated are given reasonable consideration few cases of precocious dementia will escape early detection.

The so-called maniac depressive group of cases make up another large portion of all mental ills. They too present a wide variation in type and course of symptoms. In less recent literature only distinctive types were considered under the name of circular insanity. Chiefly due to the efforts of Kraepelin, the classification and limits of this disorder extend from the dementia praecox borderland on the one side to the senile borderland on the other and have by common consent absorbed simple manias and melancholias. The onset may occur as early as in the case of dementia praecox. I have seen two cases at sixteen and one attack with recovery at seventy. Going back to the parent group of typical circular psychoses, it has often occurred to me that oscillation psychosis or insanity would better characterize this condition. The most constant thing about this psychosis is the tendency to recurrence of the symptom complex. Fairly constant in each individual comes a recurrence without the necessity of any well defined provoking cause but rather with a neurotic temperament and neuropathic heredity. A.family tendency to psychosis seems to be an important predisposing factor in maniac depressive conditions notwithstanding our desire to eliminate hereditary influences in medicine. It has been interesting for me to note the relative freedom of these patients from stigmata of degeneracy and especially as compared with cases of dementia praecox. Results of careful examination of the hands, feet, faces, and heads compare favorably with findings in average normal individuals. The symptoms presented, as a rule, are mild in early life, most intense in middle life and more frequent and tenacious in late life. Where a recovery occurs, distinct mental symptoms endure for from three to six months. If you are looking for a well defined cycle you are likely to be disappointed. It seldom occurs. It is not infrequent that one sees distinct mania and distinct melancholia together with a fairly good mental poise all within one year and in an atypical case even within the space of twenty-four hours. Here much diagnostic importance should be attached to a mere change of spirits and vigor of the individual. A man a little before middle age may start out with a thousand dollars and by virtue of his illness accumulate a million. Some one has said that he should surely be stopped when he reaches the million mark for he is likely to lose it in much less time than he made it. Conversely a man with a good farm may sell it at a great sacrifice and begin devoting his time exclusively to religious literature, not because of a genuine piety but because he is in the beginning of the melancholy phase of a maniac depressive attack. Nothing pays better in a distinctly mature patient suspected of this type than carefully probing into his earlier life. Invariably a history of attacks of nervous prostration or mental flurries will be found. In suspected cases such evidence in the face of an apparently complete recovery may be regarded as pathognomonic of the maniac depressive state. Patients suffering from this condition should be observed closely and supervised carefully as the symptoms, though for a time very mild, may rapidly attain such intensity that the patient can do himself great harm financially or physically and perchance he may not confine his morbid activities to himself. It is here a noteworthy fact that in the disturbed mental processes characterizing extremes of this maniac depressive state the mind takes numerous flights into imaginative fields as a rule with small

cause, little logic and practically no evidence of systematization of ideas.

In speaking of systematized ideas one instinctively turns his thoughts toward the one distinctly delusional psychosis, namely, paranoia. Under this heading a relatively small number of cases are to be grouped, and yet these individuals suffer so much, are so trying to their families and physisians and so dangerous to the community that they cannot be passed by unnoticed. Exaltation or depression of spirit are as a rule noticeable by their absence. True some considerable disturbance of temperament may occur. It is a seguel to the delusion and not a cause. In this incipient stage these patients readily pass for neurathenics, therefore, beware of the secretive neurasthenic with a grievance or chip on his shoulder. As soon as the paranoidal symptoms develop be quick to seek consultation and slow to give medicine. patients are insidious troublemakers. The condition is progressive although much of the whole span of life may be usefully lived before the patient reaches a state demanding incarceration in a hospital. Under the head of rudimentary paranoia Mendel disposes of a large group of phobias and obsessions. This classification of them is a very satisfactory one. There is practically no limit to the things a man or woman may feel and imagine and yet lead a rather active life. Most troublesome among these are those with well defined but imaginary physical ills, for as Patrick aptly put it once, "you can't bank much on them." They neither respond to treatment or remain loyal to their physician. An early diagnosis can often be made based upon neurasthenic symptoms, incompatible temperament, paranoidal ideas and psychopathic family history. An early decision is as important for the physician himself as for the treatment of the patient and general good of society.

In some respects general paresis as a mental disorder is in a class by itself. Krafft-Ebing says, "syphilization and civilization". Recent researches tend to show that spirochaeta pallida may be found in all cases so that perhaps we need only syphilis. Nobody can be regarded as immune. Owing to its protean tendencies everybody frequently overlooks it at its onset. In endeavoring to make a diagnosis do not expect to find all cardinal text book findings in a common case; you may find almost none at all, and yet be dealing with paresis. In attempting to eliminate paralytic dementia from a suspected

case, negative laboratory reports are of no value. Edwards says that a man developing this disorder may smoke in church. This would impress me as being a relatively late symptom but such conduct bespeaks the presence of a fundamental change. namely, dementia. This dementia is insidious in its onset and if looked for may be in evidence long before the family are aware anything is going wrong. A good man losing his grip without apparent cause and before his time demands careful investigation for historical, laboratory and clinical evidence of syphilis and it will usually be found. It is interesting here to note that in paresis it is well nigh impossible to find a case in which the patient took reasonably good care of himself and his syphilis after infection. Neglected syphilis should always suggest paresis, but it should be born in mind that a syphilitic patient may have any other form of mental disease.

The last disease occurring from point of time is senile dementia. A simple dementia in the senile may be looked upon as physiological, but senile dementia ordinarily considered in psychiatry implies a rather distinct clinical entity occurring late in life but at that somewhat prematurely and with strongly marked symptoms. One is rather quick to compare this condition with dementia praecox and paresis because of the similarity of the irritability of these patients and vacillating tendency of the symptoms and the progressive dementia. Its diagnosis is important chiefly as it may influence one's prognosis. If an active man, although but sixty years old and but slightly disordered mentally, is irritable, wakeful, volcanic and impulsive he must be looked upon as suffering from senile dementia and must not be expected to recover. At the age of sixty a patient may recover from a number of the other psychoses.

#### SUMMARY.

The diagnosis of incipient mental disease, while presenting problems peculiar to itself, is not so difficult as to deter any physician from arriving at a fairly accurate conclusion.

Second, timely diagnosis of the disorders of the mind is quite as important as a timely diagnosis of other diseases and conditions for parallel reasons.

Third, in arriving at an early diagnosis of various mental diseases, the stereotyped text book findings cannot be relied upon chiefly because they

are not to be found except in a few cases and then relatively late. Rather must one, after dealing with historical facts, make a comparative study of the personality and with this aid determine the cardinal direction of the symptoms and their probable destination.

### REPORT OF TWO ADENOMAS OF THE THYROID GLAND.

BY JULIUS J. BELLIN, M. D.,

GREEN BAY.

Case Reports: Case I, Mrs. H. P., age 51, weight 210 pounds, mother of ten children (Fig. I), entered the Wisconsin Deaconess Hospital, Green Bay, Wis., Oct. 1st, 1915, with the following his-



Fig. I.

tory: Family history negative to tuberculosis and carcinoma. The thyroid gland started to enlarge about twenty-five years ago her general health always has been good until Oct. 1st, 1915, when she started to have sharp shooting pains in the neck, which came and went at irregular periods. She had difficulty in swallowing, was very hoarse, and breathing was labored when lying down. This condition gradually grew worse until it was intol-She had no chills, no tremor, nor have her eyes changed in any way. The pulse varied from 85 to 100. Systolic blood pressure 150. Operation was performed Oct. 8, 1915, under ether anesthesia; morphine-atropin was given one hour before operation. The gland was exposed by the usual transverse Kocher incision, which affords free access and leaves an almost imperceptible scar.

Both lobes were removed, and the isthmus was removed by clamping with a curved clamp, divided, and the surface cauterized, then ligated. The gland weighed, immediately after removal, two and one-half pounds (Fig. II). The patient made an uneventful recovery, sat up on the fourth day, and left the hospital on the twelfth day. This goitre had a general connective tissue hyperplasia throughout, with multiple circumscribed adenomas.

Case 2, Mr. J. H., age 30, weight 155 lbs., married, always has lived on a farm. He entered Wisconsin Deaconess Hospital Aug. 20, 1915, with the following history (Fig. III): Family history negative to tuberculosis and carcinoma. The left lobe of the thyroid gland started to enlarge at the age of nineteen when he contracted a severe cold. He had shooting pains in the side of the neck which came and went at irregular intervals. He had difficulty in swallowing, was very hoarse, and



Fig. II.

breathing was labored. This condition continued for a month when all the symptoms subsided except the swelling. The goitre has steadily grown but did not cause any further trouble until two years ago, when he again began to have sharp, shooting pains through the tumor at intervals, and breathing again became more labored when lying down. He had difficulty in swallowing, and was very hoarse all the time, hardly able to speak above a whisper. About June 15, 1915, he started to have chills, fevers, and attacks of diarrhoea, which have kept up to the time of the operation. This man always had a full growth of hair with heavy evebrows, and at the time he entered the hospital the hair on his head was materially lessened and the eyebrows were very small. The hair in the axillae had almost entirely disappeared. Operation was

performed Aug. 27, 1915, under ether anesthesia. Morphine-atropine was given one hour before operating. The tumor was an adenoma with monolocular cyst. The patient made an uneventful recovery, left hospital on the fourteenth day, and has been in good health ever since; his voice has not given him any trouble at all, and the bowels have been normal.

In considering the pathology of the thyroid we have in mind three elemental tissues which enter into the anatomic formation of the gland. The connective tissue that holds the gland together, the epithelial or specific enzyme cells, and the blood and lymph vessels: these three histologic elements are involved separately or combined to produce the enlargements. The etiologic factors of acute infection are suppuration in some other position,



Fig. III.

which metastasizes to the thyroid. The most common is epidemic streptococcus pharyngitis and tonsillitis. Of the chronic types of the thyroid enlargement the drinking water probably plays the most important role, and it is in this type of enlargement that physicians differ as to the cases that should be treated medically and those that should be operated upon. The general physician has been slow to accept the surgical treatment, and has advised against operation in the mild cases because they would recover under medication; again, he has advised against surgical intervention in the worst cases because of a fear that the patient could not stand operation. Likewise the patient has been informed that medicine would not cure him, and that an operation would be fatal-not very consoling for one with increasing pressure on his windpipe. As our knowledge of the pathology of the thyroid becomes more advanced it will probably be found that malignancy never develops in the healthy gland but always in a pre-existing lesion. Therefore from the standpoint of prophylaxis, the removal of any pathological condition in the thyroid, especially tumors of the adenomatous type, is advisable aside from the cosmetic result or the relief of pressure symptoms, since the danger of the development of malignant disease is greatly reduced if not entirely removed.

## ROENTGEN RAY DIAGNOSIS IN DISEASES OF THE ACCESSORY SINUSES.\*

BY EUGENE A. SMITH, M. D.,

#### MILWAUKEE.

In X-ray diagnosis in disease of the skull, the Roentgenologist encounters many peculiarities with which he does not have to contend in his examination of the rest of the body. The art lies in the interpretation of light and shadow. In a plain bone surface there is a great deal of detail to be seen, and the alterations of the detail are different and characteristic in each disease.

In the skull, inasmuch as it is impossible to examine any given point, except through the overlapping or overlying of other parts of the skull, the differentiation in bone detail is impossible, and therefore it is rarely possible to make a diagnosis as to the nature of the disease present, and all we can say is that the outline of a sinus has seen altered or that there is more tissue or fluid in a sinus than normal.

The antero-posterior position in the examination of sinuses is much the best, because the side position will only show the sinuses of one side. Where possible, radiograms should always be taken and viewed stereoscopically. Since the sinuses are placed symmetrically in the skull the diagnosis is made by a comparison of the sinuses of one side with those of the others. Pus, mucus, or tissue in excess can be shown, although it has been proven by experiment that it is impossible to say which is present. The sinuses, being comparatively hollow, the presence of excess tissue or fluid offers greater

<sup>\*</sup>Read before the Milwaukee Oto-Ophthalmic Society, March 16th, 1915.

density to the X-ray and the sinus affected appears brighter in the radiogram than the sinus of the opposite side. The sinuses of the sides are never exactly the same in shape, but their translucence should be the same, and their outlines in health should be sharp in a good radiogram. Any blurning of the outlines usually means a congested mucous membrane. Where one sinus is absent or very small the other is apt to be very large, although there is no normal standard of size.

When new growths or an abnormal amount of fluid are found in the region of the more delicate bones, the outlines of the bones may be not only overshadowed but apparently obliterated. In such a condition the examiner may be unable to decide whether the bones are eroded, the sinuses congenitally absent, or simply obscured by the greater density of the sinus contents. In these cases control plates should be made.

Another peculiarity met with in the study of diseased sinuses is that there is almost complete absence of new bone formation, or regeneration. It must be remembered that an X-ray diagnosis is never of itself sufficient, but must be taken as complementary evidence to the clinical history, as submitted by the attending physician.

Whenever possible a transcript of all clinical evidence should accompany the patient to the roentgenologist, or, better still, this record should be sent to the roentgenologist before the patient, so that he may be fully informed before trying to develop the roentgenological signs.

In trying to determine the nature of the disease from which the patient is suffering, careful inspection should be made of the bones of the vault of the skull for signs of syphilis, tuberculosis or other systemic diseases. The teeth and alveolar processes frequently show the source of the sinus infection and sometimes an unsuspected skull fracture may be at the bottom of it.

The supra-orbital, ethmoidal, antra, and mastoids show up especially well in radiograms, but I wish to take this opportunity to ask you not to expect the roentgenologist to give you an X-ray diagnosis of all the sinuses from one plate, as it is impossible. The various sinuses are best shown each from a different angle and the X-ray tube and skull must be adjusted accordingly.

The sinuses to be examined as determined by the collateral clinical evidence, having been X-rayed, at least twenty-four hours should be allowed the roentgenologist for the study of the plates. Any hurried opinion is never a well founded opinion, and a wet plate is a treacherous means of information. Fortunately these cases are rarely emergency ones and do not press for a diagnosis.

Mucoceles, especially of the frontal sinus, with the accumulation of secretion and thinning of the bony walls; dental cysts invading the maxillary sinus; naso-antral polypi; the extent of malignant disease of the sinuses; foreign bodies, such as misplaced drainage tube and obturators; collections of pus and sero-mucus, may all be shown in our skiagrams.

The general conclusions of the value of skiagrams in accessory sinus infection are best summed up in the words of Turner and Porter:

- 1. Skiagraphy is a valuable aid in the study of the development of the air cavities, and it is the only method by which we can determine in the living, and without any operative interference, the existence of all the air sinuses.
- 2. By means of the skiagram we can define the size of the frontal sinuses, the position of the intersinus septum, the presence of the subsidiary partitions in the cavity, and a supra-orbital extension of the sinus. To some extent, also, the relation of the sinus to the anterior ethmoidal cells can also be determined.
- 3. From the anatomical knowledge derived from skiagraphy we are placed in a better position to decide as to the kind of operation which should be carried out upon the diseased frontal sinus, and to a lesser extent, also upon the ethmoidal cells.
- 4. A preliminary study of the skiagram may also be of anatomical assistance prior to operations upon the maxillary and sphenoidal sinuses, but it is not of such importance, as in the case of the frontal sinus.
- 5. Skiagraphy is of undoubted diagnostic value in cases of inflammation and suppuration of the nasal sinuses, but it must be used in conjunction with other methods of diagnosis. It cannot, however, be regarded in every case as perfectly reliable.
- 6. Its diagnostic value is greatest in connection with disease in frontal and ethmoidal sinuses, but we believe that further experience will demonstrate

its usefulness in the detection of sphenoidal sinus suppuration.

- 7. In children in whom it may be inexpedient or impossible to earry out intra-nasal diagnostic procedures, it will prove of undoubted advantage to obtain a skiagram of the sinuses.
- 8. The skiagram does not allow us to draw any conclusions as to the exact nature of the pathological contents of a sinus or as to the degree of inflammatory change which has taken place in its mucous membrane.
- 9. By means of the fluorescent screen we are able to ascertain the position of cannulae or other instruments introduced into the sinuses for therapeutic purposes by way of the nasal cavity.
- 10. The skiagram may be usefully employed for ascertaining the size of dental cysts occupying the maxillary sinus, in determining the origin of choanal polypi, and for assisting us in defining the limitations of malignant growths in the sinuses.
- 11. It is a valuable diagnostic aid in the detection of foreign bodies in the sinus.
- 12. It is of service in determining the effect of treatment upon the inflammatory affections of the accessory sinuses.

# DIAGNOSTIC THESES IN PULMONARY TUBERCULOSIS.\*

BY LAWRASON BROWN, M. D.,

SARANAC LAKE, N. Y.

Since the time of Hippocrates, many medical aphorisms have been published, and as they eonvey in a concise and at times a clear manner the experience of the writer, they are often read. Such theses must include many well-known facts to which all subscribe, and their raison d'être lies in the fact that assent or dissent is at once forthcoming. For the beginner in work in pulmonary tuberculosis, succinct opinions on diagnosis are of great assistance.

#### DIAGNOSTIC THESES.

- 1. An appearance of ruddy health does not exclude tuberculosis.
- ·2. In any patient with constitutional symptoms, no matter of what he complains, the possibility of tuberculosis must be kept constantly in mind.
- 3. Prolonged and intimate exposure at any time of life, but especially in ehildhood, and in home or workshop or office, is vastly more important in diagnosis than "unassociated" or "noncontact" heredity.
- 4. Prolonged contact with tuberculosis may lead to infection, but debilitating conditions are necessary usually to cause this to develop into clinical tuberculosis.
- 5. Constitutional or general symptoms lead us to a diagnosis of tuberculosis, while the localizing symptoms point out the organs involved.
- 6. The history or presence of certain complications, as fistula-in-ano, pleurisy, dry or especially with effusion, adenitis, a discharging ear, coming on painlessly, are all strongly suggestive of tuberculosis.
- 7. Loss of color, prolonged exposure to tuberculous infection, especially in childhood, with a history of swollen glands at that time, the more recent subjection to debilitating eonditions, the presence of unequivocal constitutional and localizing symptoms, with or without the aforementioned complications, demand a diagnosis of pulmonary tuberculosis even though no abnormal physical signs are present in the lungs.
- 8. Your patients, your friends, your family are as prone to contract and develop pulmonary tuberculosis as hundreds of others.
- 9. The importance of physical examination in the diagnosis of pulmonary tuberculosis has been over-emphasized.
- 10. Symptoms are a better and more accurate guide to activity than physical signs.
- 11. Symptoms without physical signs demand treatment, while physical signs without symptoms require only eareful watching.
  - 12. Slight but persistent rise in temperature

<sup>\*</sup>From Journal American Medical Association, 1915, LXIV, 1977.

and increase in rapidity of pulse are often present early in the disease.

- 13. The usual weight of a patient who develops pulmonary tuberculosis is often 10 pounds below the normal weight for his height and age.
- 14. Failure to interpret rightly the significance of symptoms, to detect the presence of abnormal physical signs, can be condoned; but failure to ask for and examine the sputum repeatedly in any patient with chronic cough is inexcusable.
- 15. Absence of tubercle bacilli in the sputum means only that bronchial ulceration has not occurred.
- 16. Auscultation and inspection are the most important procedures in the detection of abnormal physical signs.
- 17. Inspection reveals localized retraction of the class wall and limitations of the class movement.
- 18. Auscultation is more important than inspection, and the detection of rales by the auscultation of the inspiration following cough is the most important procedure in the detection of physical signs of early pulmonary tuberculosis.
- 19. Changes in the relative lengths and intensity of the inspiration and expiration are valuable but less easy to detect.
- 20. The disease is practically always more extensive than the physical signs indicate.
- 21. Abnormal physical signs in one apex should be considered as due to pulmenary tuberculosis until proved not to be, while those at the base should be looked on as nontuberculous until definitely proved so.
- 22. The fluoroscope, the roentgenogram and stereoscopic plates may reveal and locate pathologic pulmonary changes to be detected by no other means.
- 23. When sputum is lacking, or when tubercle bacilli are absent on repeated examinations, the possibility of the presence of bronchiectasis, hyperthyroidism, syphilis and influenza, and more rarely pulmonary tumor and Hodgkin's disease, should be borne in mind.
  - 24. No modification of the tuberculin tests as

yet devised differentiates clearly clinical tuberculosis that demands vigorous treatment from nonclinical tuberculosis that requires only a God-fearing life.

25. It may be impossible to determine definitely the presence or absence of clinical tuberculosis.

# ¶ Pay your dues. They were due January 1.

¶ Your secretary is too busy getting new members to fool away good time "dunning" you.

#### ¶ Do it now!

#### "Ohio Medical Journal."

### ENDOWMENT OF \$500,000 TO AMERICAN COLLEGE OF SURGEONS.

The American College of Surgeons begins the new year with an announcement that it has secured from its Fellows an endowment fund of \$500,000. This fund is to be held in perpetuity, the income only to be used to advance the purposes of the College. By this means lasting progress toward the purposes of the College is assured.

The College, which is not a teaching institution but rather a society or a college in the original sense, now lists about 3400 Fellows in Canada and in the United States. Without precedent for swiftness of development it stands today a powerful factor both in the art and in the economics of surgery.

Primarily the College is concerned with the training of surgeons. But the significant fact in connection with the endowment just secured is that it has come from the surgeons themselves, inspired by a motive for better service to the patient. Ideals in the profession of medicine are living things. Probably no more convincing proof of this fact exists than the sacrifice which the surgeons of this continent have made willingly in order to raise this fund.

To begin with, these ideals are to find concrete expression along the following lines of activity:

1. Since the whole problem of the training of specialists for the practice of surgery is the primary purpose of the College, the Regents propose at an early date to present a clear conception of the College to the undergraduate medical students of this continent. The Regents, further, will ask each senior student of this group who has in mind to specialize in general surgery or any branch of surgery to register with the College. As these

students, then, serve later as internes and as surgical assistants, they will be requested to report these facts to the College. The College, in turn, will systematically seek information as to the ability and character of such men; and the information thus obtained becomes the basis of admission to Fellowship in the College. In addition to this procedure, the Regents will insist upon the proper keeping of case histories, and they will endeavor to stimulate in these men in training right ideals of medical practice. In this program they ask the active co-operation of the faculties of the medical schools and of all practitioners of medicine.

- 2. Inasmuch as proper training in surgery is inseparably involved with the conduct and efficiency of hospitals, the College will seek accurate data on all matters which relate to hospitals. From time to time it will publish studies upon hospital problems, the purpose being always to be helpful to the hospitals. These publications, further, will inform recent medical graduates as to where they may seek adequate general or special training in surgery. To be concrete the College will deal with such problems as (a) the proper equipment for medical diagnosis, e. g., well equipped laboratories for chemical, pathological, and X-Ray work; (b) the proper forms for case histories and the facilities for keeping these records; (c) the management and the curricula of the nurses training schools; (d) the specialization essention in any well organized hospital.
- 3. The College will ask the faculties of medical schools to consider the advisability of conferring a supplementary degree of proficiency in general surgery and in the various specialties of surgery.
- 4. The College will issue readable monographs, educational in nature, to the press, to the general public, to hospital trustees, and to the profession of medicine upon subjects of medical procedure and the whole meaning of fitness to practice surgery.

The entire impetus of the College springs from within its own membership. Necessarily that impetus implies reform. But there is a vast difference between reform preached at men and reform innate in the hearts of men which finds expression at their own initiative. Whatever impetus the College possesses, it originates among the surgeons themselves. It is not an extraneous force or an "uplift" movement. But rather, out of the widely divergent views on many subjects among the Fellows, the aims of the College rise as those time-tried aspirations which are inherently the basis of all that is valuable in the vocation of surgery. The purposes of the College are concerned directly with matters of character and of training, with the betterment of hospitals and of the teaching facilities of medical schools, with laws which relate to medical practice and privilege, and with an unselfish protection of the public from incompetent service; in a word, they embody those ideals which have stood the test of centuries. Upon these the Fellows are united. These are the ideals which each Fellow, single-handed, has endeavored to foster, and the expression of them today through the College comes as a sort of mass-consciousness of the whole body of Fellows. The splendid fact is that the Fellows have grasped in an instant the meaning of the College by a process of fusion and they have gladly made sacrifices for its success.

As one comes into wide acquaintance with the Fellows of the College and catches some fair notion of their earnestness, he sees the future of the organization not by means of logic. There is something more subtle and potent than argument. A determined optimism carries a momentum of its own. Without a logical process it seeks concrete expression, and, more than this, it really recreates circumstances through all shifts of weather or play of incident with a certainty not excelled by an utterly rational course. The Fellows of the College, in their widely scattered districts, fuse their consciousness of the organization with a splendid hope in their hearts to advance all that is important and valuable in the profession. This very attitude of mind is the first promise for the future of the College. It is a promise that admits of no defeat. It is a pledge of lovalty to medical patriotism which means loyalty to the public welfare exercised through intellectual sincerity and scientific accuracy. It means a safeguard to the public, for it indicates where honest and adequate surgery may

Throughout the state, in almost every county, a vigorous campaign for new members is being waged. . . . But, let's not forget that before going forward we must make secure our present position. We must reenlist every member who served in 1915. . . . You can do your share by sending a check to your County Secretary today. Your dues were due January 1.

Publication No. 91, New York Association for Improving FLIES AND DIARRHEAL DISEASE.

the Condition of the Poor.

The Bureau of Public Health and Hygiene of the New York Association for Improving the Condition of the Poor has issued a special publication entitled, "Flies and Diarrheal Disease," descriptive of its three months' study in the homes of over a thousand infants in New York City on the relation of flies and diarrheal disease. Special attention has been given such influencing factors as dirt and artificial feeding, and their relative importance determined. A full description of the study with its important conclusions may be obtained by request from Philip S. Platt, Superintendent of the Bureau, 105 East 22d St., New York, N. Y.

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L. M. WARFIELD, M. D., Editor 79 Wisconsin Street, Milwaukee

J. P. McMAHON, M. D, Managing Editor 141 Wisconsin Street, Milwaukee

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#### **EDITORIALS**

#### Aies Kaustus

And Apollo the physician and Aescula-, pius and all the Gods of Healing arieved, for their disciples said they had not time to do the things they left undone---that their hours were long and their labors hard and the contine of each day left little time for the worship of their Gods. So they gave to them this year an extra day---a three hundred sixty sixth--and willed that on this day each practitioner of our ancient art shall search his heart and make amends for his past negligence. And he who on this day, in due humility, shall right a wrong; or aid a needy brother in distress; or strive for nem ideals and truth and confidence---forgetting self the while in love of brothers of the faith---shall all the year be blessed and know the jou of real accomplishment.

--- St. Boostheimer.

#### A CORRECTION.

Our attention has been called to an error in the published Report of the Committee on Public Policy and Legislation which appeared in the January issue.

On page 305 the report states, "The fee exacted

from registered nurses is \$25.00." This is incorrect. The bill says the fee shall be \$10.00.

This is only one of the many errors which may creep in through the Editor and he again asks indulgence for his mistakes.

#### CANCER.

We are in receipt of a report of the Commission on Cancer of the Medical Society of the State of Pennsylvania. This Commission has been gathering data since its inception in 1909 and now has reached the point where it can see tangible results of its energetic campaign. All the counties last year had special meetings devoted to the cancer problem.

The American Society for the Control of Cancer organized two years ago was the natural result of the efforts in one State to study the cancer question. We note a total of twenty-five states which are now undertaking systematic cancer work in some form or other. But we do not see the name "Wisconsin". Why? We can not answer. Two years ago the Cancer Committee of the State Society had charts drawn up, printed and sent to the seventeen hundred physicians of the State Society. The charts were so arranged that they could be filled out with the minimum of time and trouble. The response was so discouraging that the Committee asked to be relieved and no other was appointed. Why did not the members of the society co-operate with the Committee? No answer. Possibly inherent inertia, possibly some other reasons. At any rate the response was negligible.

There must be more interest now in the subject. Why not have the subject brought up by someone at every County Society and District Society meeting once during this year? Then have the President of the State Society appoint a Committee who could use the same form which was sent out two years ago. We could then have a report at the next meeting of the State Society at Madison. Let the County Secretaries cogitate upon this and if they think that it is worth while, they can arrange to have it brought forward at one of the meetings. We can not be a "Bigger, Better Wisconsin" and bring up the rear of the profession.

# THE LOAN LIBRARY OF THE PUBLIC HEALTH SERVICE.

Word has been sent out from the Public Health Service that a large stereopticon loan library is available to physicians, health organizations, educators, welfare workers and others, for purposes of lectures and demonstrating on a variety of subjects. The exhibits include such collections as Alaska, Children and Children's Diseases, Health Exhibits, Hookworm, Indians, Leprosy, Malaria, Milk, Parasites and Organisms, Pellagra, Plague, General Service of the U. S. Public Health Service, Small Pox, Trachoma, Tuberculosis, Typhoid Fever, Yellow Fever, etc. Some of these collections are of purely medical interest, others are of general interest.

Persons desiring slides should advise the Bureau as to what subjects they are interested in, so that the proper catalogs may be forwarded. The slides should be selected by number, and the request made upon the application blank. If desired, the Public Health Service will undertake to make the selection provided the applicant will state what he wishes to illustrate. There is no arbitrary limit within which the slides are to be returned, but as the demand far exceeds the supply, it is expected that they will be returned at the earliest possible moment. It is expected that slides broken by careless handling or packing will be replaced; these to be ordered from the Government contractor by the U.S. Public Health Service and the bill therefor to be paid by the borrower. Photographs, from which it is possible to obtain slides of public health interest will be gladly received and promptly returned.

#### THE RIGHT KIND OF SURGERY.

In another column of this issue we print in full a most gratifying announcement concerning the endowment, aims, ideals and purposes of the American College of Surgeons. The plan is a comprehensive one and with the large fund subscribed by the members there is reason to believe that the practice of surgery will be eventually placed upon a plane where it rightfully belongs.

Close observation during the past years has convinced every right-minded man that butchery of human beings should be stopped. There has been too much indiscriminate hacking of the human body by those illy qualified to perform operations. If this be the dawning of a new era we welcome it gladly and hope that the college will be able to set standards which will be a protection to the public.

# INTRAVENOUS ADMINISTRATION OF SOLUTIONS OF GLUCOSE.

There have been times in the experience of all when a patient was starving because of the inability to retain food, that we racked our brains and figuratively tore our hair in despair. How could we introduce into the patient any sort of food which would be utilized and not be harmful when given parentually? There has been in recent years a constantly increasing tendency to administer drugs directly into the blood stream. Unquestionably it is the ideal therapeutic procedure. After drugs comes food, and many attempts have been made to use predigested protein substances and sugars. Salts and water have been given for some years.

New and interesting light has been brought to this question by the experiments of Woodyatt and his associates (Jour. Amer. Med. Ass'n, 1915, LXV, 2067). It is impossible to give a complete abstract of their article as the article itself is a summary of results. We advise all to read it carefully. Briefly, Woodyatt argues that all previous work on the utilization of glucose has been of little value because the time element of utilization (tolerance) has been totally disregarded. He says, "Tolerance must be regarded as a velocity, not as a weight. It must be measured and expressed in grams of glucose per kilogram of body weight per hour of time." He therefore takes as his unit of time one hour and expresses the tolerance in grams per kilograms of body weight per hour. He finds

that the normal individual can utilize 0.85 gram glucose per kilogram of body weight hourly, a much higher figure than had heretofore been supposed to exist. That is to say that a man weighing 70 kilos (154 lbs.) can be given intravenously 63 grams of glucose per hour for several hours without any resulting glucosuria. At that rate he would receive 4 times 63 calories (252) per hour so that in less than half a day he would receive as many calories of food value as are needed by a man doing a hard day's work. In order to give the solution he has devised a special electrically driven pump which can be accurately controlled so that it will deliver any stated amount per hour into a vein. possibilities of such parenteral feeding in many cases of illness are at once apparent.

Further he finds that a most unbelievable diure sis can be produced in animals by injecting 5.4 gms. of glucose per kilogram of body hourly. In a dog weighing 10 kilos there was a diuresis of 600 c.c. per hour, a rate equal to 100 liters in twenty-four hours for a man weighing 150 lbs.

An interesting fact developed from these experiments. The old idea that the glycogenic function of the liver is indispensable for the utilization of glucose, is disproved once and for all. Again, it is absolutely disproved that any large quantity of glucose given by vein always causes glucosuria and diuresis.

As Woodyatt definitely says "Intravenous nutrition with glucose is thus proved to be a feasible clinical proposition." Certainly this should be good news to us all.

At the Milwaukee County Hospital where we are continually administering drugs and normal saline, and have also given glucose intravenously, we shall surely follow up the suggestions of Woodyatt and hope to be able to obtain results comparable to his. He promises further reports on clinical cases which we shall await with interest.

#### MILWAUKEE HONORED.

Already in these columns we have commented upon the meeting of the American Association for Study and Prevention of Infant Mortality which will be held at Milwaukee this year. The preliminary announcement has come to hand giving the meeting dates, October 19, 20, 21. Again we wish to call attention to this meeting. We feel that this will be one of the most important and far-reaching

gatherings which will take place in Milwaukee and we again express the hope that the attendance and membership will be large and enthusiastic. Dr. Taylor, the local member of the Executive Committee, says that the ordinary attendance at these meetings is from 500 to 800. We trust that the attendance at the Milwaukee meeting will not fall short of the higher figure. The objects of the Association are:

To educate and enlighten the public on important phases of child welfare.

To stimulate local investigations into the causes of infant mortality.

To start local child welfare campaigns and advise with regard to best methods of conducting them.

To act as a central bureau for the collection and dissemination of information relative to the prevention of infant mortality.

To correlate existing child welfare activities.

To bring about the inclusion of subjects pertaining to mothercraft in the public schools.

To secure a division of child hygiene in the department of health of every State and large city.

To secure the passage and enforcement of laws requiring the registration of births.

Active membership in the Association is \$3.00. Doctor, will you help the cause along? Send checks to Dr. J. G. Taylor, Wells Building, Milwaukee.

#### TRACHOMA IN THE UNITED STATES.

We are rather prone to think that diseases which infest the poorer portions of Europe can not be introduced into this Promised Land. Now and then we receive a severe shock when information reaches us that not only are diseases, supposed to be exclusively confined to far-away areas of the globe, here in our midst but that they are here and claiming appalling numbers of victims. It was so with Pellagra. Now comes a publication from the National Committee for the Prevention of Blindness which presents facts and figures in regard to the widespread prevalence of Trachoma which fairly stagger the reader.

Read this extract from page 7:

"It comes as a shock to our intelligence to learn that in the State of Kentucky it is estimated after

careful survey by the United States Public Health Service, that there are thirty-three thousand cases of trachoma, and, again that of the three hundred and twenty-three thousand Indians in our country fully twenty-five per cent., or nearly sixty-five thousand, are infected. In the State of Ohio only two years ago, among the employees of one of the largest industrial concerns, we read of an outbreak which became so serious that it was necessary to call in the aid of the Government before the spread of the infection could be checked and the disease eradicated among those already attacked. It was not a pleasant bit of news that greeted the fathers and mothers in one of the most cultured southern cities last spring, when the headlines of their morning papers announced more than one hundred cases discovered among the children in the city's public schools."

How did trachoma enter this country? It was no doubt brought in by immigrants from southeastern Europe. The early clinical signs of the disease are not always revealed by such examinations as immigrants receive. Once introduced the common towel in the public schools, the use of handkerchiefs in common are chief factors in spreading the disease.

No one dies of trachoma but among those with the disease fully half are made blind, others have their working capacity reduced, and all cured cases show more or less unsightly scarring of the lids or corneae. Poverty, overcrowding and ignorance help to keep the disease alive and to spread it through whole communities.

The facts given in this publication are almost beyond belief. The ray of hope in this appalling situation is the active work in treatment and prevention now being carried on by agents of the Public Health Service. Free clinics are established in places where the disease is most prevalent and practical demonstrations of proper hygiene are given to the people. The campaign carried on in Kentucky among the mountaineers has already shown gratifying results.

The disease is not unknown in Wisconsin. How prevalent it is we do not know but at the Milwaukee County Hospital there are always one or two cases, the majority of which are foreigners, Poles and Slavs.

Reprinted from the Military Surgeon for January, 1916.

THE OBJECTS OF THE FIRST AID CONFERENCE.\*

BY 1ST LIEUT. JOSEPH C. BLOODGOOD, M. R. C. (INACTIVE),

BALTIMORE, MD.

The First Aid Conference met in Washington on August 23 and 24. The call of the Conference was a letter, dated July 30th, signed by a number of chief surgeons of railroads.

The membership of this First Aid Conference consisted of representatives of the Medical Departments of the Army, Navy and Public Health Service, of the American Red Cross, chief surgeons of a number of railroads of the United States, civil surgeons representing national surgical associations, general officials representing the railroads, and representatives of manufacturers of first aid supplies.

In the pamphlet issued to the members of this conference the motto to be adopted was as follows:

Uniformity in methods; standardization of material; fixed, uniform rules for all under ordinary circumstances, without interfering with the surgeon's liberty of action as far as initiative towards better methods is concerned.

The discussion of the first day and evening was confined to the following topics:

Whether it was a good plan for railroads, manufacturers, mines, and other employers of labor to furnish first-aid packages, fixation dressings and stretchers for transportation at convenient places, quickly available in time of accident.

The character of the first aid package: its size, what it should contain, and whether the size and character of the different bandages and gauze pads should vary for different kinds of wounds and for varying environment. That is, would a single first aid package meet all the requirements?

Whether any disinfectant (and if so, what kind) should be placed in the first aid package to be used by the individual or some nearby helper.

Whether these packages should be issued to the individual laborer as they are to the soldier, or whether the packages should be kept in boxes in readily accessible places.

<sup>\*</sup>Read before the Association of Military Surgeons of the United States at its meeting in Washington, D. C., September 13-15, 1915.

Whether there should be placed a first aid package containing special dressings for larger wounds and burns, and some liquid or solid ointment for the immediate protection of such wounds.

How much should the individual laborer be told about first aid, and the best method of instruction.

This purely first aid problem and the question of an antiseptic received the larger consideration.

The problem of fixation dressings for fractures, that is, the character of the splint and how it should be arranged for first aid, was given less attention.

Also the question of a uniform stretcher was not dwelt upon in the discussions, but was emphasized later in the addresses of Drs. Harvey Cushing and George W. Crile.

The transactions which are about to be published will contain these discussions.

Perhaps it is worth while here to give a brief resumé of the opinions of these surgeons who have seen the actual workings and results of a well-organized scheme of first aid throughout a railroad system, and others who at the present time have gotten along without it.

Many railroads in the United States furnish no first aid material, but some of these provide stretchers at convenient places along the line. Their men receive no instruction on first aid. When a man is injured, the orders are to get hold of the nearest doctor, or have some one take the injured to the nearest railroad surgeon. Everything, therefore, is left to the surgeon.

Other railroads, working apparently under the same conditions, have adopted and have maintained for a number of years a scheme of first aid as complete as in the army. Not only are materials supplied, but the men are instructed how to use them.

It seemed to be the consensus of opinion that railroads, mines and other employers of labor should furnish first aid material, and give first aid instruction under the supervision of their surgical departments to their employes.

Those who have adopted such a system are of the opinion that the results are better and the period of disability shorter, and for these reasons it is a distinctly economic gain; without much doubt it is very humane from the standpoint of furnishing the best possible immediate treatment in cases of accident.

More than one chief surgeon on returning to his

duties after attending the conference decided to introduce first aid methods.

The majority of surgeons favored a simple first aid package of sterile gauze, the size of the latter varying and the gauze to be fixed by a bandage or adhesive straps. Many favored the employment of the triangular handkerchief of von Esmarch. The majority of surgeons were against giving any anticeptic for the use by the injured or any untrained "good samaritan." For larger wounds, and especially burns, it was the concensus of opinion that some form of vaseline or oil dressing should be provided, so that it would be readily accessible for such injuries.

The general officials of railroads seemed to be impressed with the importance and the economic value of uniform methods and standardized material. The manufacturers were quite certain that standardization and uniformity would reduce the price of all the materials.

The object of this First Aid Conference was to bring out a discussion of this kind and to demonstrate to all those who participated in the conference that, on the whole, there was a pretty uniform opinion as to what onght to be done. But the materials and the instructions required standardization, and this could only be done properly after further investigation.

The second object of the meeting was the unanimous adoption of a resolution leading to the appointment of a Board of Standardization.

This excellent resolution was drafted by Assistant Surgeon General W. C. Rucker, of the U. S. Public Health Service, Major Robert U. Patterson, of the Medical Corps of the U. S. Army, representing the American National Red Cross, and Dr. William L. Estes, Chairman of the Committee on Fractures of the American Surgical Association. The resolution adopted is as follows:

Whereas, There is a great lack of uniformity in first aid methods; in first aid packages, and in other first aid equipment; and in first aid instruction, and

Whereas, Many of the aims of first aid are defeated thereby and needless suffering and expense incurred, therefore, be it

Resolved, That this Conference recommends to the President of the United States that he appoint a "Board on First Aid Standardization," said Board to consist of one officer each from the Medical Corps of the U. S. Army, the Medical Corps of the U. S. Navy, the U. S. Public Health Service, the American National Red Cross, the American Medical Association, the American Surgi-

cal Association and the Association of Railway Chief Surgeons of America; this Board to deliberate carefully on first aid methods, packages, equipment and instruction and to recommend a standard for each to a subsequent session of this Conference to be called by the Permanent Chairman; the creation and maintenance of the said Board to be without expense to the United States.

This Board of Standardization has been appointed and the names will soon be published.

The object, therefore, of the First Aid Conference was accomplished.

The importance of this meeting—at least in the minds of those who attended it, was shown by the fact that by a majority vote it was decided to make the conference permanent, to call it the American First Aid Conference. The temporary officers were made permanent, and are to act as a responsible Executive Committee.

This First Aid Conference will convene again when the Board of First Aid Standardization is ready to report.

The entire proceedings were carefully reported, and a Committee on Publication was authorized to publish the transactions and add to this such other data as they might deem important.

The other features will consist of a summary of the answers to the following five questions:

- 1. What has been your experience with the most available first-aid package and dressing for small and large wounds?
- 2. What has been your experience with the immediate employment of antiseptics in accidental wounds; what antiseptic have you used, in what strength, and how applied? Have you employed tincture of iodine; If so, how and what have been the results?
- 3. What in your experience has been the most efficient and most readily applied method of fixation for injuries of the (a) upper and (b) the lower extremity?
- 4. Have you considered the construction of a stretcher, which, in addition to serving as a means of transportation of injured, will have appliances for the fixation of the upper and lower extremity, somewhat along the lines of a Bradford splint, or the Gihon naval splint?
- 5. Please state your views on some liquid ointment dressing which would be available for first-aid in large wounds and burns, with the object of preventing the usual dry-gauze dressing adhering to the wound and rendering subsequent dressings painless?

These questions have already been sent to all chief surgeons of railroads, mines, manufacturers, etc., to many civil surgeons interested in accident

surgery, to military surgeons, and to a number of American surgeons who have had an opportunity to observe the results of first aid in the present war in Europe.

With the hope of getting more information and of stimulating attention to this subject, the secretary of the First Aid Conference has addressed the secretaries of all the national surgical associations and all the State medical societies with the request that first aid committees be appointed.

In this communication it is suggested that these committees investigate the subject independently and report to the Board on First Aid Standardization the results of their investigation.

Apparently this is the first great effort to investigate what might be called the national opinion and experience on a single surgical problem, and to correlate the facts obtained with the expectation of recommending something standard and uniform, which with the simplest means will accomplish the best results. For example, if iodine is good in New York, it should give equal results in every State in the Union, and should be adopted at once throughout the United States. If iodine is unnecessary in the first aid package, there is no reason why everyone should not know it at once.

If this method of obtaining the consensus of opinion of surgeons of this country and of collecting and correlating their experience in accident surgery is successful, and the Board of Standardization is able to formulate uniform methods and adopt standard materials, something more is accomplished than the result in accidental surgery, because, if this is successful here, it can be employed with many other problems in surgery in which there is a difference of opinion and great variation in material and methods for accomplishing the same results.

Again, if this investigation accomplishes what is hoped, first aid will take its definite place in preventive medicine.

Since the preparation of the above article, and in accordance with the resolution of the American First Aid Conference recommending the appointment of a board on first aid standardization, President Wilson announced on November 9 the appointment of such a commission, whose membership represents eight technical medical and relief organizations. The personnel of this commission is as follows:

Colonel Louis A. La Garde, United States Army, retired, representing the Army; Major Robert U. Patterson, representing the Red Cross; Surgeon A. M. Fauntleroy, representing the Navy; Assistant Surgeon General W. C. Rucker, representing the U. S. Public Health Service; Dr. A. Shelton Horsley, of Richmond, Va., representing the American Medical Association; Dr. S. C. Plummer, of Chicago, representing the American Association of Railway Surgeons; Dr. John P. Kaster, representing the American Association of Railroad Chief Surgeons; and Dr. Richard A. Harte, of Philadelphia, representing the American Surgical Association.

This commission will investigate first aid methods, packages, the standardization of first aid equipment and an identical course of instruction to be followed throughout the country, and will report on these subjects to the American First Aid Conference. The president of this conference is Gen. W. C. Gorgas, Surgeon General of the United States Army, and the vice-president is Rupert Blue, Surgeon General of the United States Public Health Service.

EDITOR MILITARY SURGEON.

WHAT is your County Society doing to improve conditions in your county? Is it helping to make it a healthy community? Why not take up some constructive local public health work this winter—something that will permanently benefit your fellow citizens?

#### THE FACTOR OF POVERTY IN SANITATION.

The factor of poverty in sanitary problems was discussed in Washington, Nov. 26, by Surgeon General William C. Gorgas, whose success in cleaning up Havana and the Panama canal zone have brought him recognition as America's leading sanitarian. His audience was the Clinical Society of Surgeons, assembled in their twenty-fourth annual meeting. Dr. Gorgas said, in part:

"Such sanitary work as is necessary in the tropics is inexpensive, but measures directed against special disease are not the greatest good that can be accomplished by sanitation.

"Before these great results that we can all now see are possible for the sanitarian, we shall have to alleviate more or less the poverty at present existing in all civilized communities. Poverty is the greatest of all breeders of disease and the stone-wall against which every sanitarian must finally impinge.

"During the last ten years of my sanitary work I have thought much on this subject. Of what practical measure could the modern sanitarian avail himself to alleviate the poverty of that class of our population which most needs sanitation? It is evident that this poverty is principally due to low wages; that low wages in modern communities are principally due to the fact that there are many more men competing for work than there are jobs to divide among these men. To alleviate this poverty two methods are possible, either a measure directed toward decreasing the number of men competing for jobs, or, on the other hand measures directed toward increasing the number of jobs.

"The modern sanitarian can very easily decrease the number of men competing for jobs; if by next summer he should introduce infected stegomyia mosquitos at a dozen different places in the southern United States he could practically guarantee that when winter came we would have several million less persons competing for jobs in the United States than we have at present. This has been the method that man has been subject to for the last six or seven thousand years, but it does not appeal to me, nor, I believe, to yourselves. This method is at present being tried on a huge scale by means of the great war in Europe. I do not think that I risk much in predicting that, when this war is over and we shall have eliminated three or four million of the most vigorous workers in Europe, wages will rise and for a long time no man will be unable anywhere in Europe to get a job at pretty fair wages.

"But I am sure that every sanitarian would much rather adopt measures looking toward the increase of jobs rather than, as we have done in the past, submit to measures that decrease the number of competitors for jobs.

"I recently heard one of the members of the Cabinet state that in the United States 55 per cent. of the arable land, for one reason or another, is being held out of use. Now suppose in the United States we could put into effect some measure that would force this 55 per cent. of our arable land into use. The effect at once would be to double the number of jobs. If the jobs were doubled in number wages would be doubly increased. The only way I can think of forcing this unused land into use is a tax on land values.

"I therefore urge for your consideration, as the most important sanitary measure that can be at present devised, a tax on land values."

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### NEXT ANNUAL SESSION, MADISON, OCTOBER, 1916. The Wisconsin Medical Journal, Official Publication

#### LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

President.

County.	President.	Secretary.
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Ashiand-Dayheid-fion	1 30 30 1 (1) 7 3	O. Diaun, Ashianu.
Barron-Polk-Washburn-Sawyer-Burnett	A. N. Nelson, Clear Lake	1. G. Babcock, Cumberland.
Brown-Kewaunee	I. P. Lenfesty, De Pere	H C Mix Green Bay
Calumet	I I D McCollum Percet Tunction	II T Dachton New Helatoin
Caldinet	. II. R. McCollum, Porest Junetiou	r. J. rechter, New Holstein.
Chippewa	A. C. Nussle, Chippewa Falls	A. L. Beier, Chippewa Falls.
Clark	1 H Christofferson Colby	E. L. Bradbury Neillsville
Columhla	) () Flores Dandson-ills	A. E. Calamatan Calamana
Corumnia	7. O. Force, Pardeeville	A. F. Schmenug, Columbus.
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Dane	S. Sheldon, Madison	L. If Prince Madison
Dodge	R Rachhuber Mayvilla	L C Fllictt For Lake
Door	T. D. Daenhuber, Mayvine	E. S. Elliott, Fux Lake.
Door	1. F. Lames. Egg Harnor	T. C. Proctor. Sturgeon Bay.
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Eau Claire	I C Daint Pro- Claims	T. V. Gladins, Menomonic.
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Fond du Lac	A. J. Pullen, North Fond du Lac	H. C. Werner, Fond du Lac.
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Croop Take Washans Adams	w. D. Ghagi, Monroe	L. A. Moore, Monroe.
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Dela Manie	W. W. Gregory, Stevens Point	J. D. Lindores, Stevens Point.
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Chehaman	u. r. cady, burnamwood	M. H. Fuller, Bullattel.
Sheboygan	3. 11. Stannard, Shehoygan	A. J. Knaur, Sneboygan.
St. Crolx	Philip McKeon, Clear Lake	W. H. Banks, Hudson,
Trempealeau-Jackson-Buffalo	O O Nelson Arcadia	J. J. Powell Galesville
Vernon	Inha Cohoo Woothw	El El Manager Wincome
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Walworth	A. E. Midgley, Whitewater	Edward Kinne, Elkhorn,
Washington	I. Albers, Allenton	S. J. Driessel, Barton,
Waukesha	R M Canles Wankesha	I R Noble Wankesha
Waupaca	I A Toffenson Clintonville	C IP Dawley New London
Triangle	A. Jenerson, Chintonvine	G. I. Pawiey. New London
Winnehago	Burton Clark, Oshkosh	II, W. Morgenroth, Oshkosh.
Wood	I. B. Vedder, Marshfield	W. G. Sexton, Marshfield,

#### SOCIETY PROCEEDINGS

#### ASHLAND-BAYFIELD-IRON COUNTY.

The Ashland-Bayfield-Iron County Medical Society met at the Hotel Knight on December 21, 1915, for their annual banquet and election of officers, for the ensuing year. The following were elected: President, Dr. W. T. O'Brien; vice-president, Dr. J. V. Wenzel; secretarytreasurer, Dr. O. Braun; censor, Dr. M. S. Hosmer,

O. BRAUN, M. D., Scoretary.

#### DANE COUNTY

The annual meeting of the Dane County Medical Society was held at the Madison Club, Wednesday, December 15, 1915, at 7 P. M. with the following program: Annual Report of Officers; Annual Election of Officers; Miscellaneous Business. A banquet was held at 7:30 at the same place.

#### DOUGLAS COUNTY.

At the annual meeting of the Douglas County Medical Society held on December 23, 1915, Dr. W. H. Zwickey was elected president; Dr. D. R. Searle, vice-president; Dr. W. A. McEachern, secretary-treasurer; Dr. John Baird, delegate; Drs. W. E. Ground, John Baird, and L. A. Hoffmier, censors.

Dr. Eugene Riggs, St. Paul, spoke on Nervous Diseases, their Causes, Cure, and Recent Discoveries concerning them. Dr. W. E. Hatch, the retiring president, spoke on the work of the organization during the past year.

#### **DUNN-PEPIN COUNTY**

The annual meeting of the Dunn-Pepin County Medical Society was held at the Hotel Royal, Menomonie, December 8, 1915, at 5 P. M. Dr. Arthur Hirschfelder, professor of Pharmacology at the University of Minnesota addressed the society on "Disturbances in Coagulation of the Blood, and Experiments with a new Hemostatic". Dr. Fred Johnson, Eau Claire, Deputy Health Officer, read a paper, which dealt particularly with "Problems of General Hygienc and Preventive Medicine."

Officers elected for 1916 are: President, Dr. F. E. Butler, Menomonie; vice-president, Dr. A. F. Heising, Menomonie: secretary-treasurer, Dr. I. V. Grannis, Menomonie: censor, Dr. G. A. Barker, Menomonie.

A banquet was served at the Hotel and enjoyed by all of the 13 members and 4 guests present.

I. V. Grannis, M. D., Sec'y-Treas.

#### EAU CLAIRE COUNTY

NOVEMBER MEETING.

A meeting of the Eau Claire County Medical Society was held on November 29, 1915, with the following program: "The Value of the Wassermann Reaction to the General Practitioner," Dr. W. F. Lorenz; "Modern Care and Treatment of the Insanc in State Institutions," Dr. M. K. Green. Support at the Galloway at 7:15...

R. E. MITCHELL, M. D., Secretary.

#### EAU CLAIRE COUNTY.

DECEMBER MEETING.

Eau Claire County Medical Society met on December 29, 1915, and elected the following officers: President, Dr. J. C. Baird, Eau Claire; vice-president, Dr. Ivar Stoland, Eau Claire; secretary-treasurer, Dr. E. P. Hayes, Eau Claire; delegate, Dr. E. E. Tupper, Eau Claire; alternate, Dr. E. L. Mason, Eau Claire; censor, Dr. F. S. Cook, Eau Claire.

R. E. MITCHELL, M. D., Secretary.

#### FOND DU LAC COUNTY

Fond du Lac County Medical Society met on January 12, 1916. Dr. Thomas H. Hay, Stevens Point, gave a very interesting talk on "Tuberculosis with Special Reference to Early Signs and Symptoms". Dr. J. P. Connell, Fond du Lac, reported on thirteen cases of "Acute Perforation of Stomach and Duodenum".

#### JEFFERSON COUNTY

The annual business meeting of the Jefferson County Medical Society was held at Jefferson at the library on December 22, 1915. The election of officers resulted as follows: President, Dr. J. A. Keithley, Palmyra; vice-president, Dr. A. A. Busse, Jefferson; secretary-treasurer, Dr. Wm. A. Engsberg, Lake Mills; delegate, Dr. H. O. Caswell, Ft. Atkinson; alternate, Dr. Wm. E. Engsberg; program committee, Drs. A. A. Busse and R. C. Morris. Dr. C. M. Wilson of the New York Medical Society was a guest of the Society.

#### MARATHON COUNTY.

Marathon County Medical Society elected the following officers for the year 1916: President, Dr. S. M. B. Smith; vice-president, Dr. A. F. Harter; secretary-treasurer, Dr. R. M. Frawley; delegate, Dr. R. W. Jones, alternate, Dr. F. C. Nichols; censor, Dr. H. T. Schlegel.

#### PORTAGE COUNTY.

At the annual meeting of the Portage County Medical Society held at Stevens Point on January 19, 1916, the following officers were elected: President, Dr. W. W. Gregory; vice-president, Dr. D. N. Alcorn; secretary-treasurer, Dr. J. D. Lindores; delegate, Dr. F. A. Sonthwick; alternate, Dr. J. D. Lindores; censors, Drs. E. H. Rogers, F. A. Southwick and C. von Neupert, Jr.

#### SHAWANO COUNTY

Shawano Connty held its annual meeting and election of officers at Shawano on January 13, 1916. The following officers were elected: President, Dr. M. P. Cady; vice-president, Dr. W. J. Ragan; secretary-treasurer, Dr. M. H. Fuller; delegate, Dr. W. H. Cantwell; alternate, Dr. W. J. Ragan; censor, Dr. L. Rothman.

An oyster supper was served after the meeting.

#### TREMPEALEAU-JACKSON-BUFFALO

Trempealeau-Jackson-Buffalo Medical Society met on November 4, 1915, at Winona, Minnesota, and elected the following officers for the year: President, Dr. Oliver O. Nelson, Arcadia; vice-president, Dr. C. F. Peterson, Independence; secretary-treasurer, Dr. J. J. Powell, Galesville; censor, Dr. J. P. Reinhardt, Fountain City; delegate, Dr. Henry Jegi, Galesville; alternate, Dr. J. A. Palmer, Arcadia.

#### WAUKESHA COUNTY

The Waukesha County Medical Society held its annual meeting and banquet on January 21, 1916, at Waukesha Springs Sanatorium. Dr. B. M. Caples, was elected president, Dr. R. E. Davies, vice-president; Dr. J. B. Noble, secretary-treasurer, and Drs. B. M. Capes, U. J. Tibbits and G. E. Peterson members of the membership committee.

#### WOOD COUNTY.

Wood County Medical Society met at Grand Rapids on December 22, 1915, at the Wood County National Bank. Papers were read by Drs. J. C. Hayward of Marshfield, and Dr. Waters and Wm. Ruekle of Grand Rapids. Officers were elected for the ensuing year as follows: President, Dr. J. B. Vedder, Marshfield, vice-president, Dr. J. J. Looze, Grand Rapids; secretary, Dr. W. G. Sexton, Marshfield; censors, Drs. R. P. Potter and J. C. Hayward.

#### MILWAUKEE MEDICAL SOCIETY

The annual election of officers of the Milwaukee Medical Society was held on January 12, 1916, with the following result: President, Dr. F. C. Studley; vice-president, Dr. E. A. Fletcher; secretary, Dr. Oscar Lotz; treasurer, Dr. J. P. McMahon; librarian, Dr. W. L. Le Cron; curator, Dr. P. F. Rogers; member of the committee on membership, Dr. R. C. Brown; members of the council, Drs. L. F. Jermain, A. W. Gray, C. A. Evans, H. M. Brown, C. H. Stoddard, and G. E. Seaman.

#### NEWS NOTES.

Marquette University Medical Department has been elected to membership in the American Association of Medical Colleges at a recent meeting held in Chicago.

#### NEWS ITEMS AND PERSONALS

Dr. Frank Brockway, Oshkosh, appointed to succeed Dr. Norman Hoffman as head of the Wales Sanatorium, took charge of that institution on January 3rd.

Dr. G. H. Fellman, Milwaukee, physician at the Home for Dependent Children, Wauwatosa, has resigned his position. Dr. Dirk Bruins, Milwaukee, has been chosen to succeed him.

Dr. H. N. Cohen, Wrightstown, sustained a fracture of the left ankle recently, when he slipped on an icy walk.

DR. W. F. WHYTE, Madison, was recently reelected president of the State Board of Health, and Dr. E. S. Hayes, Eau Claire, re-elected vicepresident.

DR. ELMA JANES TOWNSEND, Madison, is defendant in a \$5,000 malpractice suit brought by Sarah E. Burke who alleges improper treatment of a fractured wrist.

The will of the late Dr. Eugene W. Beebe was declared null and void by Judge M. S. Sheridan, in Milwaukee County Court, on the grounds that the two witnesses to the document had not signed in the presence of each other according to law.

Dr. Louis Schapiro, formerly of Milwaukee, is now doing research work in Costa Rica for the Rockefeller Medical Institute.

Dr. L. A. Fuerstenau was elected head of the Board of Trustees of the Milwaukee Emergency Hospital at the annual meeting on January 13th, and Dr. R. W. Blumenthal was elected secretary.

DR. CHARLES E. SISSON, Elgin, Ill., formerly of La Crosse, has gone to the Pacific coast to become assistant superintendent and chief of the Medical staff of the Norwalk State Hospital near Los Angeles.

DR. JOHN M. BEFFEL, Milwaukee, has been named a member of the executive committee of the Wisconsin Wesley Foundation movement to establish a Methodist student chapel at the State University.

Dr. I. F. Thompson, Rhinelander, temporarily acting as state health officer of District No. 5, was given a permanent appointment in charge of District No. 4, with headquarters at Eau Claire. Dr. Louis Dorpat, of Oakwood, Milwaukee County, was appointed deputy state health officer for the Rhinelander district, and will take up his residence in that city. The salary of each was fixed at \$2,250.

Dr. G. L. Bellis, superintendent of Muirdale, Milwaukee County's Tuberculosis Sanatorium, has been appointed by the National Association for the Study and Prevention of Tuberculosis, as a member of a newly organized committee on standards for diagnosis of tuberculosis in children. Dr. James A. Miller of New York is chairman and Dr. Bertram H. Walters of New York is secretary.

Dr. John R. McDill, Milwaukee, who upon a request for his resignation, left his public post in the Philippine Islands, has been honored by the Philippine senate and assembly. An investigation was made by members of these two bodies, and after their report, a resolution declaring the suspension of Dr. McDill and the demand for his resignation were wholly unwarranted, was passed. Dr. McDill was professor of surgery in the University of the Philippines, was later made chief of the department of surgery in the Philippine General hospital, and was also dean of the college of medicine and surgery.

Gov. Philipp has entered an executive order directing that the right to practice medicine in Wisconsin be restored to Dr. A. R. Law of Madison. Dr. Law was deprived of the right to practice his profession by a judgment of the Circuit Court of Dane County upon his conviction of the crime of manslaughter in producing a death by an illegal operation.

DR. JOHN A. DIAMOND, Crandon, and DR. R. G. ARVESON, Frederic, have formed a partnership for the practice of their profession at Frederic.

A petition asking that the license of Dr. Arnold E. Erling, Milwaukee, be revoked on the grounds of unprofessional conduct, was filed with the clerk of the circuit court on December 28, 1915, by District Attorney Zabel. The petition was drawn up at the instance of Dr. John M. Dodd, secretary of the State Board of Medical Examiners.

The new Deaconess Hospital, Green Bay, was dedicated on January 18th.

Pneumonia caused 637 deaths in Milwaukee during 1915, almost twice as many as tuberculosis, according to the health department statistics.

The Fond du Lac county board voted down the appropriation of \$40,000 for a county tuberculosis sanatorium. The vote was 22 to 22, with two members absent, and four not voting.

Rhinelander was selected for the location of the branch laboratory of hygiene by the State Board of Health. This decision came after Oshkosh, Eau Claire, Marinette, Chippewa Falls, Ashland and Superior had been eliminated. The sum of \$2,500 yearly is available for its maintenance. The laboratory will examine samples of water, milk, sputum, cultures and swabs, and blood. Dr. A. A. Sliwinski, Oconomowoc, will have entire charge.

The Milwaukee Common Council by a vote of 25-11 voted to override the mayor's veto of that item in the budget setting aside \$26,000 for maintaining the Blue Mound Tuberculosis Sanatorium during 1916. This ends a fight of three months' duration, and means that the city will not turn over the Blue Mound patients who have incipient tuberculosis to the county and concern itself solely with preventorium work, as recommended by Health Commissioner Ruhland, and the Wisconsin Anti-Tuberculosis Association.

The Milwaukee Pediatric Society was organized at a meeting held Jan. 17, 1916. The officers are: President, Dr. Lorenzo Boorse; vice-president, Dr. J. Gurney Taylor; secretary, Dr. G. J. Kaumheimer; treasurer, Dr. Robt. C. Brown; executive committee, Drs. A. W. Myers, Geo. H. Fellman, and A. L. Kastner. Physicians throughout the state who are interested in Pediatrics are eligible to associate membership.

#### **MARRIAGES**

Dr. F. F. Newell, Burlington, and Miss Marie Barney, Charlotte, Michigan, on January 7, 1916.

DR. A. C. NIEMANN and Miss Nancy Griem, both of New Holstein, in November.

#### REMOVALS

Dr. Carl C. Beikels, La Crosse to Arcadia.

Dr. H. E. Bowers has located at Balsam Lake.

Dr. H. G. Lampson, Minneapolis, is contemplating again locating at Washburn.

Dr. Harold Helm, for the past eighteen months at Cook County Hospital, Chicago, has located at Beloit.

Dr. O. N. Mortenson, who disposed of his prac-

tiee at Waupaca some time ago, has located at Menasha.

Dr. W. A. Martens, formerly of New Holstein is now located at Prairie du Sae.

Dr. A. C. Nieman, New Holstein, has removed to Milwaukee. He is succeeded at New Holstein by Dr. A. J. Berger.

#### **DEATHS**

Dr. D. Tufte, formerly of Nelsonville, Wisconsin, and Pelican Rapids, Minnesota, died recently in Austria.

Dr. A. H. Andrus, Markesan, died suddenly of aeute indigestion on January 11, 1916, aged 55 years. He was a graduate of Starling Medical College, Columbus, Ohio—1886. Dr. Andrus formerly practiced at Gary, Ind., but for the past year was located at Markesan.

Dr. Marie W. Hawley, Bayfield, died on December 31, 1915, aged 75 years. She was born in Bath, Maine, but had been a resident of Wiseonsin for many years. In 1883 Dr. Hawley graduated from Drake University, College of Medicine, Des Moines, Iowa. She had been a resident of Bayfield for the past six or seven years.

Dr. Edmund E. Ryan, Milwaukee, died or. December 31, 1915, aged 47 years. Dr. Ryan was born in Baraboo, Wisconsin. He was graduated from Marquette University, College of Medieine, in 1900. After his graduation he was for two years physician at the National Soldiers Home. Dr. Ryan had been ill for two years.

Dr. J. D. Puffer, Ashland, died on Deeember 25, 1915, aged 67 years, of pneumonia. He was born in Buffalo, New York, but came west when a boy. Dr. Puffer studied medicine at Rush Medical College, and graduated from that institution in 1889. In 1891 he took up practice at Washburn, Wisconsin, and one year later he came to Ashland, where he purchased a drug store, which he conducted up to the time of his death.

Dr. Henry Blank, Milwaukee, died on January 13, 1916, aged 55 years, of Bright's Disease. Dr. Blank was born in Milwaukee County. He attended the Normal School at Whitewater, following which he taught for several years in the pub-

lic schools of Walworth County. He studied medicine at Rush Medical College, where he graduated in 1885. He first practiced at Jackson, Wisconsin, but for the past ten years had resided in Milwaukee.

He was a member of Milwaukee County and the State Medical Societies.

Dr. A. T. Koch, who had practiced at Wausau for nearly half a century, died on January 6, 1916, after a short illness with the grippe. Dr. Koch was a native of Germany, having been born in Stettin, Prussia, Nov. 9, 1839. At 17 years he came to America, locating at Watertown, attended the schools there and later studied medicine. He was a soldier in the Civil War with Co. C. Second Minnesota Calvalry. At the close of the war he resumed the study of medicine, graduating in 1874 from the Bennett Medical College, Chicago. He first located at St. Ansgar, Iowa, later removing to Wausau. He retired from active practice three years ago.

#### **ABSTRACTS**

HEMIANOPIC DISTURBANCES OF THE VISUAL FIELDS AFTER GUNSHOT INJURIES OF THE SKULL. Axenfeld, Th., Freiburg, (Klin, Mon. f Aug., 55, p. 126), reports 8 eases, 4 of which were doublesided. One of these was a case of hemianopsia inferior caused by a tangential shot without perforation of the bone on the right side of the occiput, affecting both visual centers, by hemorrhages or splintering of the bone. In 4 eases the lower halves of the visual fields were predominantly, but not exclusively, defective. A. also observed asymmetries of the visual fields and attributes them to exhaustion of the patient during examination. Then, at first often complete, amaurosis disappeared in all eases. Papillitis in one case was not eaused by cerebral abseess, but A. thinks that the traumatism by itself, the effect of the destroyed brain substance and hemorrhages may suffice for creating optic neuritis. If of longer duration however the formation of a brain abscess may be suspected. One patient with doublesided hemianopsia after a tangential shot complained of hallucinations in the defective visual half. From these A. inferred that even in injuries in the immediate neighborhood of the cerebral cortex the phenomena of defect are not necessarily merely cortical and do not indicate complete destruction of the cortical parts. A. emphasizes that a shot may act differently on the intra-cranial contents according to location, direction, and distance, and that therefore from shot injuries of the occiput, if there are no anatomical examinations, principal conclusions for the finer topography and physiology of the visual paths and centers.

especially with regard to unsettled questions, can be drawn only with greatest precaution.

C. Z.

ON THE SO-CALLED PRIMARY TUBERCULOSIS, AND THE CONJUNCTIVAL TUBERCULOSIS IN PATIENTS SUFFERING FROM LUPUS. Lundsgaard, (from the medical light institute of Finsen at Copenhagen, Klin, Mon. f. Ang., 55, p. 97), reports his observations on 48 patients, out of whom 19 did not have lupus of the skin, 29 were lupus patients.

One of the 19 had lupus of the nasal mucous membrane, another one was doubtful. All 19 cases were unilateral. One had tuberculosis of the ocular conjunctiva, the others only tuberculosis of the palpebral conjunctiva. In 15 eases there was marked swelling of the preaurieular glands, often with participation of the submaxillary and retromaxillary glands. In 12 eases the preanricular glands showed intense disintegration and had to be ineised and scraped. Primary tuberculosis is found exclusively in young individuals under 20 years, the frequency rises from 1 to 5 years to the age of from 16 to 20 years, in concordance with surgical tuberculosis. It is much more frequent in females. The upper lid is more frequently affected than the lower. The first symptom is the swelling of the glands, not rarely before anything pathological is seen on the conjunctiva. The ocular coujunctiva is injected, the palpebral conjunctiva to a large extent thickened, shows miliary granules, similar to lymph follicles. Sometimes irregular ulcerations are found, covered with yellowish grey secretion. L. assumes an endogenous etiology through the blood vessels and lymphaties. He thinks that the importance of tuberculosis of the nasal cavity and the tearpassages as sources of tuberculous infection of the conjunctiva has been overrated, as none of his 19 eases showed an affeetion of the tear duet. All primary eases were cured by Finsen light, which L. eonsiders superior to any other method of treatment.

In the lupus patients the age of from 1 to 5 years is spared, but the conjunctival affection is observed up to the age of from 51 to 55, most frequently between 26 and 30. The sex is irrelevant. The affection often is bilateral. The upper lid is more frequently diseased than the lower. Swelling of the lymphatic glands is doubtful, at least they never show destruction. The subjective ailments are slight and the patient may be affected for a long time without noticing it, as there is only slight swelling and minimal secretion. Most frequently the conjunctiva shows coarse granulating, easily bleeding, ulcerations and crested or gungiform excreseences and sears. Lupous conjunctivitis seems to be of ectogenous origin. Also in the lupous cases Finsen treatment was successful except in a few, in which it could not be carried through on account of shrinking or lupous changes in the surroundings of the eyes. C. Z.

A special committee of the Madison Board of Commerce has spent much time and money in a Recreational Survey of Madison, "The Four Lake City." The purpose is explained in the Foreword as follows:

"It is conceded by modern city planners and community builders that the city of greatest material growth in the future will be that city which gets the largest number of people to acknowledge the superior quality of its human background.

"It was in response to this fundamenal principle of urban and community development that an inventory of the positive and negative factors of recreation in Madison—'the four lake city'—was undertaken by this Board. A considerable outlay of time and money has been expended in this study. Time was freely given by a large number of men and women. Without the co-operation of these men and women this study could not have been made even if five times the financial outlay were expended.

"Adequate play and recreational facilities have too important a future economic value for a community to inventory the present worth of a study such as this from the standpoint of financial outlay alone. Then, too, a large proportion of crime and misery is found to have its inception in negative recreational facilities. Ample provisions for recreation are often so deciding a factor in the locating of a home or industry, or in attracting to a city a convention or a tourist party, that their importance in any movement for community promotion cannot be over estimated.

"If more efficient recreational opportunities can secure for the rising generation a lower average of crime and vice and if, in addition, it is good business for a city to capitalize its recreational assets, then this study of recreation in Madison—'the four lake city'—Wisconsin will have more than fulfilled its purpose."

There is an introduction dealing with the Nature of the Problem. The Economic Value of Healthful and Adequate Recreational Facilities. Play, it is contended, is different in child and adult life. It comprises "practically every important activity of the young child, and this is true, to a less extent, of the youth. Play of child-hood not only influences the leisure time habits of later life, but the play itself, is a profound character-making influence." There are ten chapters or divisions, really ninc, for chapter ten contains general conclusions of the Survey.

Practically every feature of City life is taken up seriatum, discussed, criticised, commented upon and its relation to the child is set forth. Such matters as Moving Pictures and Peanuts and Popcorn receive notice. Naturally the greater part of the report is devoted to playgrounds connected with the schools. The school as a social center receives a large share of attention. Complete tabulations of the use of school as District Center, Special Districts, Use of School Gymnasia, Playgrounds, etc., are given and maps and photographs are fully used in illustration.

This report appears to us to be a most valuable contribution to the accumulating literature of Social Service in its broadest sense. There is an awakening of the general civic conscience which implies a duty to one's fellow man. This report will repay study. Sincere commendation and congratulation we, for our part, extend to those who labored so earnestly for their home town.

#### **BOOK REVIEWS**

CEREBRO-SPINAL FEVER. By Thomas J. Horder, M. D., Assistant Physician, St. Bartholomew's Hospital, Major R. A. M. C. with British Expeditionary Force. Seventeen original illustrations. Oxford University Press, 1915. Price 3s 6d (\$1.25).

This little monograph of 172 pages by an English Army Surgeon is of much interest and value to medical men but is of particular interest to the military surgeon, cerebro-spinal meningitis being one of the dreaded camp diseases.

During the winter of 1914-15 and the spring of 1915, there have been more cases of cerebro-spinal fever in concentration and detention camps and in their vicinity than there have been for many years in England. The experiences gained by military surgeons in taking care of these epidemics are embodied in this book. It discusses fully the epidemiology of the disease and the important question of meningococus carriers. Very explicit and definite directions are given for lumbar puncture and for the examination of cerebro-spinal fluid. The chapter on treatment is very practical indeed, the technique of the intraspinous injection of Flexner's serum is carefully explained and the older methods of treatment are also considered.

DISEASES OF THE SKIN AND THE ERUPTIVE FEVERS. By Jay Frank Schamberz, M. D., Professor of Dermatology and Infectious Eruptive Diseases in the Philadelphia Polyclinic and College for Graduates in Medicine. Third edition, revised. Octavo of 585 pages, 248 illustrations. Philadelphia and London. W. B. Saunders Company, 1915. Cloth, \$3.00 net.

The third edition of this popular volume was probably issued more on account of the exhaustion of the previous editions than through any urgent demand for a revision.

Some changes, however, have been made which are of distinct value—particularly the addition of the metric system of weights and measures to the old Troy system of the previous editions.

A short article on the luctin test has been added in the new edition as well as a revision of the section dealing with the treatment of syphilis. A chapter has been added on Rocky Monntain Spotted Fever which makes the section dealing with the eruption fevers more complete. A few new photographs are added.

Th book remains one of the best small volumes on Dermatology, being especially popular as a text book for medical students.

ROBT, G. WASHBURN.

OUTLINES OF INTERNAL MEDICINE. FOR THE USE OF NURSES. By Clifford Bailey Farr. A. M., M. D., Instructor in Medicine, University of Pennsylvania; Assistant Visiting Physician, Philadelphia General Hospital; Pathologist to the Presbyterian Hospital. 12mo., 408 pages. illustrated with 71 engravings and 5 plates. Cloth, \$2.00, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

Dr. Farr's work on Internal Medicine is a valuable acquisition to nursing literature. It is conveniently arranged for quick reference is concise and to the point; the description of diseases, their prevention and treatment are the important features. Obscure symptoms and complications that would only serve to confuse the unpracticed mind are omitted. The arrangement is somewhat different from the usual books on this subject. It is divided and classified according to the diseases of the various systems, into ten parts. Each part devotes a few pages to the discussion of the symptoms, signs etc. most often observed in diagnosing the diseases of the particular system under consideration. Nervous and mental diseases are considered in part one, the author stating that since nervous and mental sysuptoms play such a large part in many general diseases, an early consideration of these affections seems fundamental.

The book gives information that will be of great value to the nurse in intelligently co-operating with the physician and will give her a better appreciation and value of the skillful practice of medicine.

The text is interestingly illustrated throughout with helpful engravings, plates and charts; contains 402 pages and is liberally indexed.

C. V. N.

The Practitioner's Encyclopedia of Medical Treatment, edited by W. Langdon Brown, M. D., F. R. C. P., Assistant Physician to St. Bartholomew's Hospital and Physician to the Metropolitan Hospital, and J. Keogh Murphy, M. C. F. R. C. S., Surgeon to the Miller General Hospital for South-east London and to Paddington Green Children's Hospital, with an introduction by Sir Thomas Clifford Allbutt, K. C. B., F. R. S. 8vo. 874 pages, \$8.00. Henry Frowde, Oxford University Press, London.

This volume is a veritable mine of information concerning all forms of treatment that are now in use. If one wants to know how digitalis acts, he will find a good summary. If he wants to know about high frequency current or ionization, or effects of drinking different waters, or kinds of diet, he will also find something about it.

The book is divided into two great sections, Part 1. Methods of Treatment; Part 2, Agents in Treatment.

Many men, specialists in their fields, have collaborated to make this book as near encyclopedic as possible.

Reading chapters here and there shows a remarkable uniformity of subject matter. There is naturally much condensing of material, but that has not interfered with the readability of the text.

Professor T. C. Allbutt has written an introduction which is a model. We have read it over, then gone back and reread many paragraphs.

We feel that this is a valuable reference book, and recommend it to the profession.

Modern Aspects of the Circulation in Health and Disease. By Carl J. Wiggers, M. D., Assistant Professor of Physiology in Cornell University Medical College. Octavo, 378 pages, illustrated with 104 engrav-

ings. Cloth, \$3.75, net. Lea & Febiger, Publishers, Philadelphia and New York. 1915,

Dr. Wiggers has written a most entertaining book on the circulation. He is known as a careful investigator, and has embodied much of his own work in his book.

We do not believe that this is a volume which will appeal to the mass of physicians. Only those who have been trained in the modern concepts and methods of study in heart disease, or those who have grasped the significant facts by diligent reading, will appreciate this book. And yet, it will repay careful study.

The author has divided the subject matter into three sections: the Physiology of the Circulation, Graphic Methods for the Clinician, and Diseases of the Circulation. The illustrations are well chosen, the text is clearly written. The book is recommended to those who wish to familiarize themselves with methods of modern research in heart disease.

1NSTINCT AND INTELLIGENCE. By N. C. MacNamara. F. R. C. S. 213 pages, illustrated. Oxford University Press, 1915. Price, \$2.00.

This book is a short and sketchy account of the coneurrent development of instinct and the nervous system. Beginning with the Amoeba, purposive movements and nervous development are traced upward through the Protozoa, the Hydra, the Medusae, the Echinodermata, the Worms, Crustacea, and Insects to the final development of the human brain with its instincts situated in the basal ganglia and its intelligence located in the association areas of the cortex. The first appearance of the spinal axis and early brain is described as it occurs in the Amphioxus and it is traced upward through the Fishes, the Amphibia, Reptiles, Birds, and Mammals. The lowest mammalian brain, that of the duck-bill, is described and its further development in the baboons, the anthropoid apes, and finally in the human idiot and the normal human brain.

Education, the training of the developing intelligence of the child, and the impossibility of changing to any great extent, human instinct, is discussed briefly. While there is very little new in this book to the Zoologist or Comparative Anatomist, it makes very interesting reading.

B. B. R.

MEDICAL LECTURES AND CLINICAL APHORISMS. Fourth edition by Samuel Gee, M. D., Fellow of the Royal College of Physicians, Consulting Physician to St. Bartholomew's Hospital. 392 pages. Oxford University Press, 1915. Price, \$2.00.

This is a series of short lectures on various unrelated medical subjects. To the reader who would enjoy an evening's informal chat with a physician of the old school of medicine, this book makes its appeal. The up-to-date American physician will find considerable in these lectures to which he will take exception, such as considerations of so-called Nervous Atrophy, Spinal Myalgia, or Irritable Spine, etc. While rather interesting as an exposition of the English method of considering disease entities, this book is of no great practical importance to the physician or surgeon.

B. B. R.

INFECTION AND IMMUNITY. A Text-book of Immunology and Serology. For Students and Practitioners. By Charles E. Simon, B. A., M. D., Professor of Clinical Pathology and Experimental Medicine, College of Physicians and Surgeons, Baltimore; Pathologist to the Union Protestant Infirmary, the Women's Hospital of Maryland and the Mercy Hospital, Baltimore. Third Edition, enlarged and thoroughly revised. Octavo, 351 pages, illustrated. Cloth, \$3.25, net. Lea & Febiger, Publishers, Philadelphia and New York, 1915.

The object of S.'s work is to present to the practicing physician the more important data which have already been worked out with regard to the questions: how does infection primarily take place, how does infection give rise to disease and how does the animal body overcome infection. It deals with the study of the principles underlying the interaction between the disease-producing agent and the affected organism, which is the domain of immunology. After a very lucid introduction the single chapters present in very clear language the nature of infection, the offensive forces of the invading micro-organisms, bacterial substances of the blood, antigens and antibodies, the side-chain theory, the different types of immunity, anaphylaxis and its relation to disease, active and passive immunization, chemotherapy and the application of immunological principles to diagnosis. Here the Widal reaction, Wassermann's reaction, the biological blood-test, Abderhalden's test, the different tuberculin tests of Koch, von Pirquet, Calmette, and Moro, the luetin reaction, and gonococcus reactions are described with illustrations.

The book contains all that is essential to know in this intricate subject and gives a splendid systematic instruction in immunology. By the bibliographies at the end of each chapter it is a valuable guide to further reading. The heavier type of the headings of the single paragraphs greatly facilitates orientation, as well as the table of contents and the alphabetical index.

C. ZIMMERMANN.

SYPHILIS AS A MODERN PROBLEM. By Wm. Allen Pusey, M. D., Professor of Dermatology in the University of Illinois. American Medical Association, 1915.

"This monograph is a part of the Commemoration Volume, issued by the American Medical Association at its meeting in San Francisco, June 22 to 26, 1915, as a tribute to the medical sciences, which made possible the building of the Panama Canal and the Panama Pacific Exposition."

This monograph is an excellent consideration of the subject of syphilis to place into the hands of a layman. Every man and woman of intelligence ought read this booklet and obtain from it an idea of the subject of syphilis, its history, manifestations and dangers. We do not agree with the author in all his statements regarding the history of syphilis and its transmission into subsequent generations, but the presentation is an excellent one for the lay reader.

C. A. B.

# The Wisconsin Medical Journal

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Number 10

#### ORIGINAL ARTICLES

TYPHOID PREVENTION BY BACTERIAL VACCINE.\*

BY MAJOR J. M. WHALEN, M. C., U. S. A.

An idea of the prevalence of typhoid fever may be gained from the fact that in 1910 the number of deaths from this disease for the registration area of the United States was 12,673. As the registration area covers somewhat less than one-half the population of the country, the total deaths for that year from this disease would approximate thirty thousand. Allowing a mortality rate of 10%, which is probably fair, the number of cases in the country may be said to be in the neighborhood of three hundred thousand. Osler estimated the average number of deaths from typhoid in the decade from 1900 to 1909 as from 35,000 to 40,000 and the average number of cases at a half million yearly. Its victims are usually of an age when their taking off or their enforced idleness works the greatest hardship upon their families and the community. They are the young workman and the young housewife who can the least be spared by their dependents and who can least afford the long idleness and the protracted convalescence characteristic of the disease.

Great as is the importance of typhoid to the civil community even more so has it been a scourge of armies in the field. There have been numerous examples of this within our own day. In the Franco-Prussian war the German army had nearly 75,000 cases of typhoid with approximately 7,000 deaths. In the Boer war the British army of 380,000 men had 57,000 cases of typhoid with over 8,000 deaths. In the Russo-Japanese war, the Russians had 17,000 cases; the number of deaths is not reported. Our hastily collected army of 1898 had a case of typhoid fever for every five

men in the service with one death from this cause for every sixty-seven men in the service. In both the Spanish-American and Boer wars the deaths from typhoid considerably outnumbered those due to battle, and in both typhoid accounted for a large majority of the deaths from disease. Even the thorough understanding that we have of the methods of spread of the disease does not encourage us to think that by sanitary measures alone typhoid could be kept out of our armies in active campaign. With this realization it can be seen how welcome was the promise held out by antityphoid inoculation. I will not go into the history of its development. It has been a gradual growth in knowledge of the effects of bacterial inoculation and to no one man can credit be given for any decisive discovery. Pasteur of France, Pfeiffer and Kolle of Germany and Wright of England were principally responsible for the knowledge of bacterial vaccination that we have today. Military medical men the world over followed these advances with the greatest interest, especially as even the earliest use of the typhoid vaccine was made upon soldiers. In our own military service the name of Major Fredrick F. Russell is linked with all advances in the field of anti-typhoid immunization. Major Russell, who was on duty at the Army Medical school, was, early in 1908, directed by the Surgeon General O'Reilly to make preparations to try out the method on our own troops.

As the quickest and best manner of commencing, Major Russell was ordered to London to observe at the Royal Army Medical College the methods employed by Col. Leishman in the preparation of the vaccine. As a result, shortly after his return, a board of medical officers was convened (in the words of the order) "for the purpose of investigating the question of the advisability of immunizing the Regular, and in case of war the Volunteer army against typhoid fever." This board was made up of Victor C. Vaughn, William T. Councilman, John H. Musser, Alexander Lambert, Simon Flexner, and William S. Thayer, all members of the Medical Reserve Corps U. S. Army, together with

<sup>\*</sup>Read at Quarterly Meeting of the Outagamie County Medical Society, April 28, 1915.

Approved for publication by the Surgeon-General.

Brigadier General Robert M. O'Reilly, Surgeon General, and Captain (now Major) Fredrick F. Russell of the medical corps. The proceedings of this board were formulated in general orders of January 21, 1909. The following are the words of the order: "It (the Board) proceeded to review the history of vaccination as a method of protecting troops against typhoid fever. The experience of both the English and German colonial armies was considered. The theory on which the practice is based, as well as many details involved in carrying out the procedure, were considered, as was also the probable effect on the medical profession and the public at large in the United States. As a result of several hours' discussion, the board adopted without any dissenting voices the following conclusions:

1st. The board is convinced that the practice of anti-typhoid vaccination is both useful and harmless and that it offers a practicable means of diminishing the amount of typhoid fever in the army, both in time of peace and war.

2nd. It finds that the experience to date with anti-typhoid vaccination justifies it in recommending the introduction of the practice in the regular and volunteer armies in time of war.

3rd. It recommends the immediate introduction of the practice of voluntary vaccination against typhoid in the Hospital Corps, the Nurse Corps, and in any expedition of troops from the Regular Army which is ordered to take the field for active operations and further that an opportunity be given to volunteers from the army, as a whole, to be protected by vaccination against typhoid."

It will be seen from this that the practice was not entered into lightly nor without much thought as to consequences and the conservative attitude of the service is further emphasized by the voluntary character of all inoculations recommended at this The first inoculations pursuant to these recommendations were given in March, 1909, so that we can now look back over six years of the campaign. Before presenting any figures, however, it would be well to discuss somewhat the preparation of the vaccine and its administration. Vaccines of a number of different types are being used at the present time, those of living cultures, those of killed cultures and the so-called bacillary fractions, which might better be called bacillary extracts.

Also there is no agreement whether the vaccine

should be of one or of many strains of bacteria or whether these should be virulent or non-virulent. The vaccine used in our army is a modification of the Wright and of the Pfeiffer-Kolle vaccines. It is a vaccine of a killed culture of a single nonvirulent strain of typhoid bacillus. The original culture was obtained by Major Russell from the Wright laboratory, an old culture which had lost its pathogenicity for laboratory animals but which was an abundant grower on agar. This organism is inoculated upon agar in specially constructed flasks, which gives a known surface of media. After twenty-four hours incubation the growth from each flask is washed off with from 30 to 50 cubic centimeters of sterile normal salt solution. This bacterial suspension is then put into large flasks and the organism killed by being subjected to a temperature of 53 to 54 degrees Centigrade in a water bath for one hour.

While the sterilization is taking place a count is made of the suspension for the purpose of standardizing, after which it is diluted with normal salt solution so that 1 c.c. will contain 1 billion bacilli. To the diluting fluid one-fourth percent of tricresol is added as a preservative. Throughout the whole process tests are made for the presence of contaminations and the finished product is tested on media, particularly for spore bearing organisms, and, as further measure of safety, inoculations are made into laboratory animals. If the cultural tests are satisfactory and the animals are well at the end of a week, the vaccine is ready to be put up into containers, glass ampules holding from 1 c.c. to 25 c.c. in which form it is issued for use. The reasons for most of the details of this procedure are obvious enough, but there are a few points to which it might be well to draw more particular attention. The value of an old non-pathogenic culture is that, while it has lost none of its powers of forming antibodies after inoculation, its toxicity is markedly reduced and with such an organism reaction is reduced to the minimum. The idea that a pathogenic organism was necessary and the use of freshly isolated cultures were responsible for some of the severe reactions recorded in the earlier experiences with vaccination. Herein lies the value of the stock vaccine over the so-called autogenous vaccine. The temperature at which the organism is killed is of the greatest importance. There is but a small limit of temperature between that necessary for the death of the organism and that which destroys the protective elements of the bacteria. The unsatisfactory results obtained from the earlier types of vaccines were largely due to their being overheated and their immunizing power thus destroyed. This is the explanation of the limited success of the vaccination performed in the British army during the Boer war. It is important that the tricresol be not added to the vaccine before it is heated, as the added preservative lowers materially the temperature at which the immunizing agent is destroyed.

The immunizing dose of vaccine is given in three injections, preferably at ten days interval, the entire course thus requiring three weeks. The interval between injections may be as low as seven days and in civil life this is a more convenient period than ten days. Here Saturday afternoon might well be chosen as the time of administration so that the subject would have Sunday in which to recover from any reaction that might follow. The interval between treatments should not exceed two weeks. The first injection is of one-half c.c. (7½ minims) while the second and third are of one c.c. (15 minims). The container should be well shaken before the vaccine is withdrawn. The injections are given with an ordinary hypodermic syringe into the subcutaneous tissue of the upper arm over the insertion of the detoid muscle. Injection into the muscle produces more immediate pain and subsequent discomfort and on account of more rapid absorption is liable to produce a more severe reaction. The site of the injection may be previously sterilized by any of the ordinary means, but it is entirely satisfactory to use tincture of iodine for this purpose. In the military service, where large numbers are treated at a time, it is customary to paint the site of the inoculation with 3% tincture of iodine before and after the injec-The ampule should be sterilized with an antiseptic solution before being opened and the syringe boiled. It is recommended that the administration of the prophylactic be made at about 4 o'clock in the afternoon so that the greater part of the reaction, if there be such, will occur during the night. The local reaction is quite constantly present and varies little in different cases. There is an area of hyperaemia around the needle wound, and more deeply there is a somewhat indurated and tender area an inch or two in diameter surrounding the site of inoculation. Movements of the arm are a trifle painful and there is some stiffness. Exceptionally there is some swelling and tenderness of the axillary glands but no case of suppuration has ever been reported. Sloughing around the site of injection never occurs.

These local effects are entirely due, in all probability, to the small amount of tricresol that the vaccine contains. An urticarial rash is one of the less common results. It usually involves the chest and abdomen of the patient and may persist for several days.

Herpes Labialis has been noted occasionally.

The general reaction varies more than does the local, and is frequently very mild or absent. The mild reaction is characterized by only a slight headache, feverish sensations and malaise. Moderate reactions show a fever up to or above 101° F., chill, slight nausea, profuse perspiration, and at times some nervous disturbances. Reactions classed as severe, coming on quickly after the inoculation with fever of 103° F. or more, together with gastro-intestinal symptoms, occur very rarely. Russell attributes these reactions to the introduction of the vaccine directly into a large vein.

No serious trouble follows these severe reactions and their occasional occurrence is not a valid objection to the use of the prophylactic. Persons having had a previous attack of typhoid give a higher percentage of moderate and severe reactions. The onset of the reaction is usually within six hours; it is at its height in twelve hours and has subsided in twenty-four hours, leaving only a little stiffness of the arm. Children, though complaining rather uniformly of the local pain, are usually free from anything more than the mildest general reaction. Immunization of children is quite satisfactory, judged from the standpoint of antibody production and subsequent freedom from the disease.

No case of typhoid has yet been reported from among the hundreds of children of the government services that have been immunized. Women and children are given the prophylaxis in dosage proportionate to their body weight, using one hundred and fifty pounds as a standard. At the recruiting depots each recruit is vaccinated against smallpox and given the first typhoid inoculation on the day of enlistment. At the time of the second inoculation, from seven to ten days later, many of the men are suffering from vaccinia, so that moderate reactions are more frequent, but even in these cases the ill effects are quite transient.

With this rather unavoidable exception the inoculations are not given to any person suffering from any illness, and it is recommended that in case of doubt to take the temperature and to examine the urine. With women it is better that the inoculation avoid the time during or near the menstrual period. I may have laid too much stress upon reactions and perhaps have created a wrong impression as to their severity and frequency.

It is only in the severe reactions that the pain and discomfort are comparable even to the lighter cases of vaccinia following smallpox vaccination. Russell published the results of three years' observation on general reactions following the inoculations.

His figures are based upon about one hundred and thirty thousand inoculations. Of these over seventy percent were without reaction, about twenty-five percent were followed by mild reaction, something over two percent by a moderate reaction and two inoculations of each thousand by a severe reaction. In other words, general reactions were mild or absent in ninety-seven percent of all inoculations. Fear of severe reaction has without doubt kept many from taking the treatment. The first dose once taken, however, and no further difficulty is experienced in getting the inoculations completed. In practice the reactions cause no difficulty and no permanent damage or disability has been known to follow the use of the vaccine. The interval of ten days between doses has been adopted because both experience and experiment have shown that after this period the production of antibodies is at its height. There is a slight temporary fall in the quantity of protective bodies in the patient's blood serium following the second and third administration of the vaccine, but this fall is more than compensated for within a few days. Russell strongly insists that any increased susceptibility immediately following the first inoculation is negligible and believes that, on the contrary, increased resistance begins immediately, although the degree of immunity is not great until the lapse of eight or ten days. The so-called negative phase of Wright, which for so long retarded the progress of typhoid immunization, is thus believed to be nonexistent. In our earlier experience in the army, we were afraid, because of this bogey, to give the vaccine in the presence of a typhoid epidemic, but the presence of such a condition is now regarded as only an additional indication for its use.

As before mentioned, the voluntary use of the vaccine was begun in March, 1909, and was continued as a voluntary measure until July, 1911,

when it was made compulsory for all officers and enlisted men in the service who had not reached the age of 45 years and who had not had an authenticated attack of typhoid fever. After the first eighteen months of the voluntary use of the vaccine, Russell reported that 12,644 men had been inoculated and that among this number there had been five cases of typhoid with no death. During the same period there occurred in the rest of the army 418 cases with 32 deaths. This gives a rate per thousand among the vaccinated of .39 while in the army at large the rate was nearly ten times as high. In other words, one-seventh of the army which had been vaccinated gave five cases with no death, while six-sevenths unvaccinated gave not 30 cases, but 418 with 32 deaths. The immunization of the army proceeded rapidly after July, 1911, until within a short time practically the whole force had been treated. Up to August, 1914, there had been turned out by the Army Medical School Laboratory, according to Nichols, 1,700,000 c.c. of vaccine with which 250,000 men of the Army, Navy, National Guard and other departments of the government had been immunized.

The extended use of the measure has fully kept up the promise of the first experiments. Beginning with 1911 there was a sharp drop in the typhoid rate but the full benefit of the campaign was not felt until 1913. Going back a short period, it will be seen that in 1911 the typhoid rate was 9.43 per thousand and in 1912 it was 8.58. Since that time there was a gradual fall until for several years prior to 1911 the admission rate had hovered around 3 per thousand, and the death rate around .2 per thousand. In 1911 the admission rate was .8 and the death rate .11 per thousand. In 1912 these rates had fallen to .26 and .03 respectively and in 1913 the admission rate was .03 with no death.

That is, during 1913 but 3 cases of typhoid occurred among 92,000 men and all of these recovered. No official figures are available for the year 1914 but it is understood that but two or three cases of typhoid occurred in the service during the year and that no case occurred among the immunized. There was no death from this cause during the year. The following is quoted from an article by Russell: "Remaining at home is a thing most of us are not accustomed to do; we send our patients and our families and go ourselves to the country, seaside and mountains, where the typhoid rate may be many times as high as at home. Such

terms as "vacation" typhoid and "travel" typhoid are common expressions and show the danger to which we are constantly exposed. A technical term of importance in this connection is residual typhoid, that is, the typhoid which remains in a community after pure water and good sewerage have been introduced. This is the typhoid we have been fighting in army posts the past few years; it is the typhoid which remains in New York, Washington and Richmond after these cities have been furnished with pure water. It is due to many factors, milk, flies, contaminated foods, contact with chronic and temporary carriers, and with typhoid cases." To go back to our typhoid rates of previous years we see that with the improved sanitation of army posts these rates fell until, about 1907, a rate of about three per thousand was reached and maintained for several years. We can regard that rate as a normal rate of residual typhoid for the army, and that rate is lower than any of the larger cities of the United States showed in 1910.

It was this residual typhoid, the minimum irreducible by sanitary measures, that has been wiped out in the army by vaccination. To present another viewpoint: the soldier in 1913 had some chance of acquiring typhoid. Call it one chance. In 1901 that same soldier would have had his chances multiplied by 314 and in 1907, when sanitation had apparently done its best, he still was nearly one hundred times more likely to contract typhoid than at the present time. And during the years of the vaccine's trial the army was not at home. A large part was constantly subjected to the extra hazard of camp life and travel. Beginning with the Manouver Division camps at San Antonio and Galveston, in the summer of 1911 a large proportion of the army has been under canvas ever since.

The records of the 1911 camps were heralded all over the world eighteen thousand men in camp for four months with only two cases of typhoid. Such a thing was unheard of!

But in February, 1913, the Second Division, made of troops from the posts of this section, nearly 13,000 men, went into camp at Texas City and Galveston, Texas. They are still in those camps and after more than two years under canvas no case of typhoid has appeared in the command. And this in close proximity to towns in which typhoid is quite frequent.

Likewise there have been maintained probably

an equal number of men along the Mexican border from Brownsville at the mouth of the Rio Grande to the Pacific coast, some in garrison and some in camp. The cavalry patrols, several regiments, are scattered in detachments of from five to fifteen men along the border, living under very trying conditions and yet there is no typhoid among them.

The records of practically all foreign armies bear evidence to the high efficiency of typhoid vaccination, though none will show rates equal to our own, because in all other services the inoculations are voluntary, which means that the same thoroughness not being required, it will not be exercised and many treatments will not be completed. It has been reported that typhoid immunization has been made compulsory in the French and Japanese services, though this lacks official verification. The present war is giving this measure of preventive medicine a good tryout, though very little information is yet available concerning it. However, the British Under-Secretary of State for War on February 8 announced in the House of Commons that up to that date but 421 cases of typhoid had developed in the British forces since the beginning of the war and that of this number 305 were unprotected by inoculation. He reported but one death among the inoculated and this man had received but one injection instead of two, which is customary in the British service. It has been reported that over eighty per cent of the British force volunteered for the vaccination. This would give a rate over ten times as high for the unprotected as for those who have been immunized, though it is probable that a large proportion of the latter were only partially treated. This report brings up another important point: the lowered death rate from typhoid among those inoculated. The fact that but one death occurred among 116 such cases shows the relatively mild character of the disease when modified by a previous inocula-

The value of the procedure then is above question. Another query suggests itself and is often asked—is it harmless? This is an aspect that has been kept in mind by the authorities responsible for its introduction. The question of any immediate ill effect has been already answered in the negative. The question of remote ill effects can also be satisfactorily answered. The annual reports of the Surgeon General give the army rates for all diseases, and these reports are available for reference for whosoever may wish to consult them.

If typhoid inoculation had produced a lowered resistance to infection of any sort or had been productive of evil otherwise, this effect would show in these reports. During the period since 1910 most of the rates have been unchanged or decreased.

Those that have increased during this period are for some of the eruptive fevers, diphtheria, mumps, tonsillitis. pleurisy. appendicitis, growths, and diseases of the brain and spinal cord. The increase in most of these conditions is easily accounted for by the large proportion of the army, serving under field conditions, and there is no reason for believing that the anti-typhoid vaccination is in any way responsible for any of them. It has been specifically claimed that the inoculations have the effect of activating latent or arrested tuberculosis. The records of the Surgeon General's office show that the gradual lowering of the rates for tuberculosis, which has been going on for more than a decade, has not been in any way arrested by the introduction of the inoculation.

The duration of immunity is an essential item of knowledge that still awaits settlement. The experience of the British Colonial Army in India, as reported by Firth, indicates that there is a noticeable diminution of immunity after about two and one-half years. The vaccine used in the British service is in some essential points different from our own. Then, too, the subject gets at most but two treatments, while in the American services three are given. On those accounts it is thought that the immunity in our service will be more lasting. The present orders are that the vaccine shall be repeated after three years. Laboratory experiments indicate that the protective bodies begin to decrease after eighteen months to two years, but this is a matter which only a longer experience will clear up, as also the question whether as in smallpox, the second inoculation will confer practically permanent immunity. Russell thinks that it is advisable to recommend for typhoid, as for smallpox, vaccination, once in infancy, once in childhood, once in youth and once in adult Immunity cannot be made absolute. know this from experience with smallpox and the records of typhoid immunization confirm it. Laboratory experiment likewise has demonstrated that it is impossible to immunize certain animals, and more uniformity cannot be expected among human beings. There is one difficulty in the way of arriving at absolute figures regarding the protection

afforded by the inoculations. This is due to those febrile conditions which clinically simulate typhoid fever closely, and which are due to allied bacteria. The difficulty is added to by the fact that the bacterial inoculations confer agglutinating power to the blood serum and the value of the Widal test in diagnosis is therefore lost. This leaves us only the blood culture as a means of laboratory diagnosis, a procedure that requires more than ordinary laboratory skill and much bacteriological experience. There is nothing to warrant the belief that typhoid inoculations would be protective against the paratyphoid group of bacilli.

This being the case, we must expect to have the usual number of paratyphoid fevers among the inoculated, and these, lacking a bacteriological diagnosis, will be called true typhoid. Paratyphoid fevers are reported to form a fairly large proportion of the continued fevers in certain localities, notably in the tropics, and in such places the result of typhoid inoculation may prove disappointing. It has been frequently suggested that a mixed vaccine could be prepared which would at the same time protect against both typhoid and paratyphoid, and Leishman reports that the possibilities of such a vaccine are being investigated for use in the British army.

What are the deductions that may be drawn from past experience for future guidance in military and civil life? It has been proven that the inoculations are without danger, that they are highly protective and that they are available under all circumstances. It is certain that compulsory immunization will be introduced into any militia or volunteer forces that are called into the service of the United States. Large numbers of persons who are habitually exposed to the hazards of typhoid, as physicians, nurses and hospital attendants, have been protected by vaccination. It has become quite customary for the intelligent layman to request, and for the physician to recommend vaccination against typhoid before summer vacations or travel which involves extra risk. It is recognized that, at the present time, sanitation alone is not sufficient protection and that some measure of personal prophylaxis is necessary. Vaccination against smallpox is practically universal. When it becomes generally recognized that vaccination against typhoid offers a comparable degree of immunity from this much more imminent danger, it seems that its employment should become equally general.

ON TAKING BLOOD FOR WASSERMANN TEST.

BY W. F. LORENZ, M. D.,

MENDOTA.

Taking blood for serological tests is now of frequent occurrence in the practice of a physician. Occasionally one hears of difficulties, which I believe are largely due to the employment of a defective instrument or faulty technique. Shortly after we commenced making Wassermann tests for general practitioners an occasional complaint was received at the Institute. In every such instance, the difficulty complained of concerned the use of a vacuated ampule. It has been suggested that we recommend a method of taking blood that will promise good results.

In this communication an attempt will be made by photographs and text to describe a technique, which is used in large institutions where blood specimens are taken as a routine upon every new admission.

While the use of a vacuated ampule has certain advantages, chief of which is that the blood remains sterile, the same sterility can be obtained under other conditions if the operator observes reasonable care. The disadvantage in the use of the vacuated ampule lies in the possible defects of the instrument itself. Its successful use depends upon the existence of a vacuum, which must remain intact until the needle is within the vein. Occasionally, owing to faulty construction, the ampule contains no vacuum. This absence cannot be detected before the instrument is in actual use. The vacuum may be dissipated by defective rubber tubing so that air instead of blood is aspirated. The rubber tubing may be perfect when attached to the impule but may be punctured when the glass neck is broken, with a consequent air aspiration instead of blood. The needle may not be in the vein when the neck of the ampule is broken: no blood appearing, it frequently happens that the needle is withdrawn and again air replaces the vacuum.

While we have the manufacturer's guarantee as to the perfect construction of the ampules that we have sent out to physicians, occasionally by deliberate test of a large number, we find a few that are defective. In view of the fact that there is no way of telling a defective instrument before it is put into actual use, on a few occasions the physi-

cian depending upon the same got no results. A failure to obtain blood after the skin is punctured and the vein entered is not only disappointing to the physician but embarrassing as well. It is therefore suggested that the physician employ a technique such as described in this communication. One can be practically certain of results if the operator adheres strictly to the method that follows:

In this method, which is advised in preference



Photograph No. 1, Illustration of arm without constriction.

to the use of a vacuated ampule, the following are necessary:

- 1. An all glass syringe, about 5 c.c. capacity, with needles.
  - 2. Piece of rubber tubing.
- 3. Suitable clamp for rubber tubing (Hemostat or similar instrument).
  - 4. Iodin solution.
  - 5. Sterile gauze.
  - 6. Collodion.

#### SYRINGE AND ITS PREPARATION.

An all glass syringe with a smoothly working piston gives the best results. A piston with pack-

all glass instrument similar to the Luer. The syringe and needles must be sterile before use. This is obtained by boiling. After boiling, and before its use, a sterile saline solution should be

Photograph No. 2.

Illustration of same arm with touruiquet applied. Note prominence of veins in contrast to Photograph No. 1.

drawn into and expelled from the syringe several times. After wetting the piston and inner side of the barrel with a saline solution (0.6 or 0.9% strength), it is ready to receive blood.

The use of a preliminary bath in saline is very important. Some of the water in which the syringe has been boiled, usually tap or distilled water, clings to the inner side of the barrel and piston. Blood brought in contact with this almost always hemolyzes to some extent. Such hemolyzed blood is usually anticomplementary and absolutely worthless in the Wassermann test. Alcohol left in ing or a Record syringe is not as serviceable as an the syringe will cause the same condition, so that no matter what means of sterilization is followed, a preliminary saline bath of the parts that come in contact with blood should be given in every instance. Obviously, if a syringe is sterilized in a

boiling saline solution, this wetting with saline before use is not necessary.

#### PREPARATION OF ARM.

With very few exceptions, the veins in the bend of the elbow are selected for puncture. Usually one or more of these are quite prominent. The mere prominence of a vein, however, does not always mean an easy puncture. If a choice of several veins can be made, it is advised to select that which is the most fixed. Such a vein may not be as prominent as another but it has the advantage of not rolling away from the needle. The Median Basilic right in the bend of the elbow is usually well fixed and should be taken by choice.

The veins are made prominent and easy of entrance by compression of the arm above the bend of the elbow. For this purpose a piece of rubber tubing is used as a tourniquet. Errors are occasionally made by having this constriction excessive. The fault is almost always in the direction of overconstriction, with the result that arterial as well



Photograph No. 3.

Illustrating method of making the puncture. Note position of thumb of left hand,

as venous flow is obstructed and as a consequence the veins do not stand out prominently. The constriction of the tourniquet is solely intended to overcome the small venous pressure that is present so that the return flow of the blood is obstructed and the veins become filled to their maximum. In some instances, particularly among females, the veins will not be prominent to the eye even after constriction, yet an ordinarily sensitive finger will detect the bulging vein under the skin.

The difference in the prominence of veins with and without constriction is shown in the accompanying photograph. While every case will not show superficial veins as readily as the one illus-



Photograph No. 4.

Illustrating withdrawal of the needle, compression over needle and gauze pad. Note that tourniquet has been removed.

trated, in the vast majority of cases, after constriction by a tourniquet and massage of the forearm toward the body, the patient in the meantime making a fist, the task of finding a suitable one at the elbow is not difficult. After a vein has been decided upon, the skin immediately over it is painted with an iodin soluton.

#### PUNCTURE OF THE VEIN.

In making a puncture, it is advisible to hold the skin just below the point of puncture with the fingers or thumb of the free hand. The skin should be held as in shaving. The bevel on the point should be uppermost. Usually with one steady thrust, the needle is passed at once through the skin and through the outer wall of the vein. Successful entrance into the vein becomes apparent by the appearance of blood in the syringe. Here is where the value of a smoothly working syringe comes in. The pressure of the blood within the vein is sufficient to force the piston slowly outward if it slides easily. If not, it may be necessary to assist by gentle aspiration and for this purpose, both hands can be now used in the manipulation of the syringe.

For a Wassermann test as performed at our laboratory, approximately three cubic centimeters of blood are required. When the necessary amount has been taken into the syringe, the tourniquet is removed. This is very important. In photograph No. 3 a puncture of the vein is illustrated. Note there the position of the operator's left hand, particularly the manner of holding the skin by the thumb just below the point of puncture. In photograph No. 4, the moment before withdrawal is illustrated. Note that the tourniquet has already been removed and that pressure is exerted over the needle at the point of puncture with the aid of a small pad of sterile gauze. While this pressure is being applied, the needle is withdrawn.

The absolute need of removing the tourniquet before withdrawing the needle lies in the fact that if constriction persists after removing the needle, a leakage at the point of puncture occurs. This leakage of blood from the vein will not only appear on the surface but also spreads into the sub-cutaneous tissue and a hematoma results. By removing the tourniquet first, that is, before withdrawing the needle, such a leakage rarely ever occurs. Pinching the vein between the fingers with presure over the point of puncture usually suffices to stop all hemorrhage. A small dressing of collodion is then applied.

# THE METHOD OF HANDLING BLOOD AFTER PUNCTURE.

Immediately after the syringe is withdrawn, its contents should be squirted into a small sterile container. During this procedure the patient or

assistant can continue the pressure on the gauze pad over the punctured vein.

After experimenting with various sizes and shapes, I found that a narrow slender container holding about three cubic centimeters of blood gave the best results. The clot that subsequently forms in this bottle is not easily broken up by the shaking that occurs during its transit through the mail. A larger amount of blood and a larger clot usually gives an unsatisfactory specimen. It is therefore advised that a bottle of this type known as a homeopathic vial be used. These are furnished already sterilized and labeled to the physicians by the Psychiatric Institute.

After the blood has been taken from the vein,



Illustration of blood specimens in vials. On the left blood clotted throughout. On the right the same clot thrown down by centrifugation leaving clear serum above. it should be placed at once into one of these vials and corked. Within a few minutes the blood clots and the specimen can be mailed. After it is received at our laboratory, the vial is numbered and placed in a centrifuge. The clot is thrown down and the clear supernata serum is used for a test. In the accompanying photographs, a specimen of blood is shown before and after centrifugation. While the separation is not very apparent in the picture, yet by comparison one can detect the relatively clear zone in the upper portion of one.

power centrifuge, it would of course be advisable to have him make this separation. In that event, he would simply pipette off the clear serum by means of a sterile medicine dropper or pipette and transfer this clear serum to another sterile bottle.

Approximately one cubic centimeter of such clear serum, is sufficient for a test. Such a procedure February, 1916.

would practically insure a good serum, that is, if precautions are used not to contaminate the specimen, during the necessary manipulation. However, it is not necessary to do this. We receive many specimens every day in which the entire blood is sent in a small vial and the separation of the clot from the serum made at the laboratory. The number of unserviceable sera from this method is very small, less than one in a hundred.

As a final caution, I wish to emphasize again the need of using a saline solution in the syringe before taking a blood specimen. This solution is simply drawn into the syringe and expelled several times. Secondly, the removal of constriction or tourniquet before withdrawing the needle from the vein.

Samuel Hopkins Adams makes the following reply in the "New York Tribune" to an inquiry regarding the Oxydonor:

"The Oxydonor is a metal cylinder filled with an inert substance and connected by wires with discs which are attached to the patient and are supposed to cure him by an undescribed (and purely imaginary) force called 'diaduction.' Twenty-five dollars is too much to pay for the Oxydonor, when a perfectly good 'Oxyfaker' can be made at home for a few cents. The recipe for the Oxyfaker, which I have already published in Collier's Weekly, is roughly as follows: Fill an empty tomato can with sand, ashes, garden loam, excelsior or old paper, whichever is most handy. Run a piece of string (pink or white) from each end of the can. To one string attach a one-cent postage stamp, to the other a two-cent stamp. Unused stamps are preferable, as they stick better, though the expense is greater. Paste the one-center on the site of the disease from which you are suffering. Then go to bed and call in a good doctor. While I do not claim that the Oxyfaker, unaided by the doctor, is infallible, I will guarantee it to cure any disease, pain, ailment, defect, or ill which can be cured by the Oxydonor-or his money back to M. A. C. or any other person who uses the Oxyfaker according to directions."

Some people say they are afraid to go to a sanatorium for fear of catching tuberculosis. Such a fear merely shows their ignorance of a well-regulated sanatorium. It is almost as ridiculous as to object to going to a dentist for fear one will catch the toothache. The truth is that a good sanatorium is careful to collect and destroy the sputum, and there is much less danger of infection than in a large city where people expectorate on the streets or walls of a building. The mere fact that most patients do make remarkable improvement while taking the cure at a sanatorium is the best proof that they are not reinfecting themselves nor catching other people's bugs. The results are what count. "By their fruits ye shall know them."—Miles Collins, "Journal of Outdoor Life,"

### MEDICAL INSPECTION IN THE PUBLIC SCHOOLS.\*

BY E. B. BROWN, M. D.,

BELOIT.

In this age more attention than ever before is being paid to the welfare of the child. The realization of the truth of the saying that "the child is father of the man" as well as mere humanitarian feelings, have prompted laws and regulations in the interest of child welfare. As a result we have Juvenile Courts, compulsory schooling, a Children's Bureau in the Department of Commerce and Labor, fresh air societies, and among other important movements, medical inspection in the schools. It is this latter movement which I wish to present for your consideration and discussion tonight.

The idea seems to be prevalent in this country that medical inspection of schools is something new and experimental; Brussels has had systematic inspection for forty years and Paris for thirty years. There are scientific journals in France and Germany devoted exclusively to this subject. Such inspection is national in France, England, Belgium, Sweden, Switzerland, Bulgaria and even in Japan and the Argentine Republic, and is practically national in Germany. The fact that it is considered an experiment in this country shows that America, instead of pioneering in this welfare movement, is at the rear end of the line of civilized countries.

Medical inspection of school children was not introduced into this country until 1892 when New York City appointed the first Inspector of Schools. Boston, in 1894, was the first to develop a regular system of inspection. Chicago followed in 1895 and Philadelphia in 1898. Of the states, Massachusetts, New Jersey, Colorado, Indiana (Indiana law limited to cities of 100,000), have a compulsory law. Excellent permissive laws exist in Maine, Connecticut, California, New York and District of Columbia; limited inspection laws in Washington, Oho, Louisiana, Virginia and Vermont.

Vermont, for instance, requires the testing of the eyesight of all pupils every fall with notification of parents or guardians in writing when defects are

found. In 1911 a full system of medical inspection was in force in 377 cities in the United States. That it is not more widely in force is due largely to the opposition of the so-called "League of Medical Freedom" composed mostly of Christian Scientists and controlled largely, at least in the beginning, by patent medicine interests. Dr. C. S. Carr, publicity agent for Peruna, used to be a member of the advisory board. A bill introduced into our own legislature in 1911 was killed in committee by the activity of this league, which takes pride in opposing all legislation in the interests of public health on the ground that such provisions for public welfare interfere with their personal liberty.

Medical inspection was introduced primarily to prevent the spread of contagious and infectious diseases, but soon broadened to include physical defects and general school sanitation and such conditions as predispose to contagious and infectious diseases, in fact to cover the whole physical well-being of the child in relation to its educational development. Of the children sent home from the Boston schools in 1904, only 16 percent had contagious diseases. The other 84 percent represented disabilities not contagious but serious enough to require the child to be sent home to preserve his health.

The highest aim of medical inspection is well expressed in the act passed in 1908 by the British Board of Education which says; Medical inspection "is founded on a recognition of the close connection which exists between the physical and mental condition of the children and the whole process of education. It recognizes the importance of a satisfactory environment, physical and educational, and by bringing into greater prominence the effect of environment upon the personality of the individual child seeks to secure ultimately for every child, normal or defective, those conditions of life compatible with the full and effective development of its organic functions, its special senses, and its mental powers, which constitute a true education."

In the public schools our children are thrown into close personal contact. The child of the careful parent from the clean home mixes with the child of the careless parent from the unclean home. The consequence too often is that trouble is expected when the children of a family start to school. I have in mind one family of six children. Nothing more than slight colds had been their lot

<sup>\*</sup>Read before the Eau Claire County Medical Society, March 29, 1915.

until they entered school. Then it was a succession of mumps, measles, chicken pox, scarlet fever and typhoid, one thing after another through the whole family. We compel the children to go to school and rightly. But shall we not go farther and see to it that the school is made as far as possible a safe place for the child? If we require the children to go to school, is it not right that we require the children to be inspected, that no child shall remain who is a menace in any way to others? Shall we not require the school building to be inspected that the general sanitation, heating, lighting, ventilation, seating, toilets and playgrounds shall be right as far as possible? If this is properly done, the time will come when the child will be as safe or safer in the school than in the average home. With medical inspection in the schools, epidemics of contagious diseases are better controlled with the schools open than with them closed.

Medical inspection, however, not only examines the child in the light of his relation to other children, but, and this is even more important, it examines the child in the light of its own best development to detect any physical condition which may be handicapping the child. Any of you who have visited the schools and studied the children, will not question the need of such inspection unless indeed you are as blind as the parents themselves or as narrow and bigoted as the supporters of the League of Medical Freedom. Visit any of your schools and you will find there children with pinched faces and narrow chests breathing through open mouths, listless and backward in their work. You will find children who cannot hear all that the teacher says and hence are set down as stupid, children who cannot see the writing on the board except from the front of the room, whose copybooks blur and who quickly tire of their work or are obliged to stop work on account of headaches, children who are nervous and irritable because of the irritation of parasites or various skin diseases, children who suffer from indigestion and whose whole vitality is lowered because of the germ-breeding cavities in their carious teeth. The parents associated with the child from the beginning do not notice these defects, or they say, "Oh, yes, he has always breathed through his mouth. He will outgrow it." "If he turns his head to one side when he writes or reads, it's just a habit he has." "All children must have measles, mumps, etc., and the sooner the better." "He does talk a little thick but time will remedy that." "Decayed teeth! Why they are only his first teeth and will soon be dropping out anyway, so no use bothering about them." "To be sure he has earache and sore throat quite often but that is nothing unusual." And what is the result? The poor child does not complain because he does not understand. He only knows that he does not feel like working. Many a child becomes a drag on his teacher and his classmates through no fault of his own. He falls behind, becomes discouraged and naturally comes to dislike school work. Such a child is well started, if not on a life of utter failure, at least on a life far below what might have been possible had he not been thus handicapped.

Teachers say classes could get on much faster if the students all attended regularly and all were in good health. If the mouth-breathing child, the child with poor eyesight or defective hearing, if any neglected child is holding the class back, whose liberty is being interfered with? If the class is being held back by such children-and any teacher will say so—is not the taxpayer's money being wasted? Repeaters are expensive. Young has stated that they cost Chicago \$200,000 a year. I venture to say that at least 10 per cent of the pupils in your schools fail to pass their grades each year. You have 3,400 pupils. The annual total cost for each pupil is practically \$40, which makes a total of \$13,600 as the cost of your repeaters.

It is generally agreed that bad eyes, bad teeth, bad throat, bad physical condition generally, are responsible for a large percentage of these failures to pass. Is there any reason in the outcry that the rights of personal liberty are being infringed upon simply because we point out to the parent the fact that his child is handicapped, and endeavor to interest him in its welfare not only for its own sake but also for the sake of the general well-being and progress of the school?

Let me cite a few statistics which, though dry, are full of significance as to the need of school inspection. In the year 1908, the city of Boston inspected 51,099 pupils and found 1.115 afflicted with specific infectious diseases, 6.919 with oral and respiratory diseases, 2.300 with diseases of the eye, 11,083 with diseases of the skin, 526 with diseases of the ear, 10,137 with miscellaneous diseases. Total, 32,080 out of 51,000 needing attention. In 1909, 68,858 were examined in the public and parochial schools. Of these, 41,048 were suf-

fering from some ailment. In 1910, out of 61,055 examined, 40,176 were suffering from some form of disease.

In the city of New York, out of 78,401 pupils whose eyes were examined 17,298 or one in five were found to have defective vision in some form. Cohn, in examining 10,000 pupils of German mixed schools, found myopia in about 10 per cent of the cases, village schools 1.4 per cent, city primary about 6.7 per cent (note the increase as we go up from lower to the higher schools), city grammar schools 7.7 per cent, high schools for girls 10.3 per cent; for boys, 19.7 per cent; colleges, 26.2 per cent; universities, 60 per cent.

This would seem to show that the school conditions are largely responsible for the defective eyesight and that it increases with the age of the child and the period of schooling. In the city of Washington, 43,000 children were examined, and 15,304, or one out of three, had one or more physical defects. According to Dr. Bardeen, the physical examinations of the students entering the University of Wisconsin show that at least 75 percent have some defect more or less serious, a good proportion if which could no doubt have been prevented or remedied by proper medical inspection in the schools. Such are the figures, and similar results have been found wherever scientific inspection has been applied.

Medical inspection was started in the Beloit schools in April, 1910, by action of the school board, one inspector having charge of the work. At that time, there were only three or four other places in the state having systematic inspection. Now, Neenah, LaCrosse, Green Bay, Oshkosh, Ashland, Wausau, Racine, Two Rivers, Baraboo, Milwaukee, Superior and Madison are in line, and five of these have established an open air school.

The plan I have carried out in Beloit has been to visit one school a day and make a routine physical examination of the pupils of the 2nd, 4th, 6th, and 8th grades. A record is kept and each child is thus examined once in two years. Besides the routine examinations in these grades, children from other grades suspected by the teacher of having trouble of any kind are sent in as specials. Wherever defects are found, the parents are notified on printed blanks. The eyes and ears of all pupils in the 2nd to 8th grades, inclusive, are tested every fall by the teacher, and parents notified when defects are found. Doubtful cases are referred to the inspector. Children are excluded who show

symptoms of any of the contagious diseases, also those having tuberculosis, tonsillitis, pediculosis, scabies, ringworm, impetigo and suppurating ears. Children are not uncovered in making physical examinations and individual wooden tongue depressors are used in all throat examinations. In suspicious cases, cultures are made from the throat. All cases needing attention are referred to the family physician, no treatment being given except that in cases of pediculosis, scabies, ringworm and impetigo, printed cards are supplied on which are directions for treatment and a detachable prescription which can be used if desired.

Naturally, there has been some opposition on the part of the parents. Some have resented being informed that their children's teeth needed attention or that there were nits in their hair, evidently going on the principle that "where ignorance is bliss 'tis folly to be wise." Some: in their ignorance think they are wise. Here is a part of a letter received when inspection was first started:

"I am sending Isabel to school. I wish to say that I do not want the child sent home again without a reason. If Dr. Brown says that the child had lice he's a *liar* and don't you dare to send her home without any reason. I found some dirt and some dandruff but I'm satisfied there were no such thing as lice. If he can't tell plain dirt from lice he better learn the difference at once for his own good."

The story is told of one boy who took home a note saying he needed a bath. He brought back this reply: "Willie ain't a flower, he's a boy; larn him, don't smell him." Another boy, whose teacher sent home a note stating that he was not perfect optically, brought back this reply: "The old man whaled Johnny last night and I took a hand this morning, and I think now you will find him all right." One parent, answering a query as to data for the physical record card, wrote as follows: "Miss Tuttle-I do not know where Levi was borned at or anything about his parents as we adopted him from the Sparta Wis. School, but I should not hesitate to say that his parents were Africo-Americans." If you could see Levi's little black face and wooly head you would have to admit that she was probably right.

But there has been less and less ignorance and opposition on the part of parents as they have come to understand better what medical inspection means. Some parents have even requested that

their children be examined. More discouraging than the opposition of the parents is their apathy, their lack of appreciation of what it would mean to the child not only now but in later life, if its needs were attended to. In many cases the response would be satisfactory if it were not for the expense and from the child's standpoint it would be a splendid thing if a free or small-pay medical and dental dispensary could be maintained wherever medical inspection is carried out. Several pitiful cases come to mind—one of a girl of ten whose evesight I found very poor and she was suffering from daily headaches. On inquiry I found that she had had glasses but on coming to live with her aunt, who was a Christian Scientist, the glasses had been taken away from her. The little girl wanted her glasses back as she said herself that she could not see that the Science treatments were helping her eyes at all, and she knew that she could get on better with her glasses. One of the most distressing cases of adenoids I have seen was a little lad in a Christian Science family, and needless to say, the note sent home received no attention. A little girl of eight years was sent in to me two or three years ago because her teacher recognized that the mother was not giving the child the right care. This was the only child, a sister had died of pneumonia and for fear she would lose this one, the mother was sending the child to school with several extra waists and petticoats on so that the child was in a perspiration just sitting at her desk, and at home, no open windows for fear of a draft. Just the other day, the teacher told me that this mother visits the school quite often now, that she has had her little girl's adenoids removed and has come to have new ideas about clothing and fresh air.

The family physician is often apt to be lax, passing lightly over ailments which, though minor, yet have their bearing on the general well-being. Small sources of irritation are enough to upset the balance of a child and the source, though small, may lead to serious consequences. Adenoids and enlarged tonsils are not small matters when we consider Dr. N. P. Stauffer's recent statement that, according to the census of 1900, of 90,000 deaf persons in the United States, 51,000 were deaf from childhood, that 75 percent of deafness is caused by discharging ears and that 75 percent of discharging ears are due to adenoids and hypertrophied tonsils; and yet many a case really in need of surgical treatment, when taken to the

family physician at our suggestion, has been put off with an ineffective nasal spray or tonic instead of being referred to a specialist for thorough treatment. If we physicians were retained on the Chinese basis of "No well no pay," would we not begin to look out for the elimination of physical defects even before the child started to school? The family physician also is often careless in his instructions to the parents. One child with a well developed case of scabies was told by his physician that it was all right for him to attend school, as the trouble could only be given to other children by sleeping with them or using the same towels. As a result, we had four or five other cases among his schoolmates. A parent came to me at one time in anger saying that his physician had said that there was nothing in the child's hair. I had to show him the nits on the hair before he was satisfied.

Even though medical inspection, like all preventive medicine, may in time tend to lessen the doctors' revenue, yet humanitarian principles demand that it shall have the support and co-operation of the medical profession. And this, as a rule, the doctors are ready to give as no class is more interested in prevention of disease and more ready to support measures in the interest of health and physical welfare than the doctors. Last year, in the Beloit schools, 969 children were given a routine physical examination. 34 per cent of these were found to have one or more defects, 26 per cent had defective teeth, one in ten had enlarged tonsils and adenoids, 1.5 per cent had cardiac murmurs. 1.7 percent were excluded for such causes as pediculosis, impetigo, ringworm and suppurating ears. Adding in the specials, brings the total number examined last year up to 1,676; 557 had defective teeth, 87 enlarged tonsils, 41 adenoids, 16 cardiac murmurs. The eyes and ears of 1,949 pupils were examined. Of these, 28 percent had not over two-thirds of normal vision and 11 percent had not even as good as two-thirds of normal vision. 8.8 percent had defective hearing.

Wherever medical inspection has been carried out, the findings have been a good deal the same, but the results obtained have varied widely, depending largely on the method of following up cases, the best results being obtained where school nurses are employed to follow the work of the inspector by visiting the homes and talking with the parents. In Beloit we have not yet reached the point of having a school nurse, much as we should

like one, but we have a woman attendance officer who took special work in Chicago last summer in connection with the Visiting Nurse Association, and she has been very helpful in following up cases, especially in looking up needy cases, and in a number of instances she has arranged for operations or dental work or glasses where the family could not afford it. The teachers are instructed to look over the stubs of the blanks sent home, and if after a month or two the notice has received no attention, the case is referred to Mrs. Aldrich for a follow-up call.

Results in this work cannot be estimated alone according to the number who have their defects attended to. It is a matter of education. Parents are getting to be more particular about the condition of their children before sending them to school, they are coming to realize the importance of conditions which they had previously regarded as of slight consequence. They are beginning to appreciate that inspection makes the school a safer place for their children. Teachers are more on the alert, and now recognize important symptoms and signs. For the children themselves the results will show not only in present improvement but for many, in greater happiness and succes in their later life. As for immediate results, in the last three years, 180 have had operations for tonsils and adenoids, 923 have had teeth attended to, and 151 have been fitted with glasses. With the help of a nurse to explain and urge the matter in the home, these figures would be greatly increased. That Medical Inspection of Schools is a move in the right direction, is my firm belief and I bespeak for this movement, which is rapidly spreading over this country, your hearty support and cooperation and especially right here in your own city. I sincerely believe that the people of Eau Claire will have no occasion to regret any action they take toward the establishment of a thorough system of medical inspection in their schools.

The curse of most places where invalids congregate is the perpetual drivel of people gossiping about the repulsive details of their interiors, till the brain becomes infested with pulse, temperature, sputum, and all the other local color of disease, to the exclusion of everything that is vivid and human and significant and worth thinking and talking about. Disease, like many other physical things, is not unseemly in itself, but is unseemly as a subject for idle chatter, and gains a force out of all proportion to its real importance by being continually dwelt upon.—Charles T. Ryder, M. D., "Journal of Outdoor Life," February, 1916.

SCHOOL MEDICAL INSPECTION WITH SPECIAL REFERENCE TO THE DETEC-TION OF DIPHTHERIA CARRIERS\*

BY JOHN ROBERT NEWMAN, B. S., M. D.,

MADISON.

This is essentially a period of prophylaxis and preventive medicine. The science of medicine today has for its purpose not only the cure of disease, but also the prevention of disease and the dissemination of such knowledge as will make a happier world with more normal and fewer abnormal citizens. The medical man, ever public spirited and altruistic, has surrounded himself with numerous aides, visiting nurses, sociological workers, civic federations and associated charities, for the education of the public in the essentials of hygiene and preventive medicine with consequent reduction and alleviation of human suffering. By natural selection the school room becomes a fertile field for work. Proper instruction of the young not only makes lasting first impressions but also carries into the homes topics for serious thought, consideration, and discussion.

Great progress has been made in the comparatively short time in which this work has been going on. At present, in the larger communities, it is the exception not to have medical school supervision and inspection in some form or another. The smaller communities also are rapidly adopting the idea and the question of dividing the country school districts into units for medical supervision has been suggested. About one-half of our states, among which Wisconsin is not included, have legislation relating to it. No doubt if after a sufficient trial the present plan of voluntary local education of pupils, parents and teachers does not yield efficient results, Wisconsin also will enact compulsory legislation. Reports from the standpoint of public welfare are highly encouraging. The laity as a whole are less hostile since they have been convinced of the resultant benefits and in addition to entering into the work with enthusiasm they have grown to demand it. Inspection is now virtually a necessity and not a luxury.

To dwell upon specific results is unnecessary.

<sup>\*</sup>Read before the joint meeting of the Rock, Green. Dane, Sauk, and Columbia County Medical Societies, Evansville, May 11, 1915.

They are self-evident. Statistics speak for themselves. The early diagnosis of pulmonary tuberculosis with consequent cure; the relief of eve strain and defective vision, which not only permits pupils to study with greater ease but prevents eve defects that may mean much suffering in later years; the detection of skeletal and joint deformitics amenable to orthopedic therapy if applied early; the cure of gastro-intestinal and other systematic disorders by proper care of the oral cavity; literally the tearing asunder of the time honored rheumatic chain of throat, joint, cardiac and kidney pathology, by removing its principal link, the diseased tonsil; the assistance given boards of public health in curbing contagious disease, are facts which need no elaboration. It was a threatening school epidemic of diphtheria which prompted this paper.

Between October 23 and December 1, 1914, there were ten cases of diphtheria from one of the parochial schools of Madison, which at that time did not have medical supervision. These cases were all clinically typical diphtheria according to reports of the physicians who took care of them. A serious school epidemic was more than a possibility. Consequently, cultures were taken from the throats of 276 pupils or 79.7 percent of the total cnrollment of 364. Seven pupils refused examination and the remaining 63 were absent, some on account of illness but most of them detained at home by their parents as a precaution against contracting diphtheria or because of certain ideas entertained by the parents, which may be considered as hostile toward school medical inspection.

Ninetcen, or 6.8 percent, gave positive cultures' of the diphtheria bacillus. In all cases which gave a suspicious culture a second confirmatory culture was made. All gave a history of having recently had a sore throat. Two had tonsilar diphtheritic membranes. Not one complained of any subjective symptoms. Therefore, it would appear that all were typical diphtheria carriers disseminating diphtheria bacilli everywhere. Under such conditions the physically weaker pupil with a low grade resistance and without any natural immunity to diphtheria might easily fall a vietim to the infection, in support of which are the ten cases reported during the five weeks previous to December first. The fact that these carriers had no subjective symptoms is comparable to the recent statistics obtained by the Schick test,1 namely, that diphtheria carriers have a high grade immunity against diphtheria.

The nineteen cases were quarantined, the school closed for one week, during which time it was cleaned and fumigated under the direction of the local board of health. School was resumed on December 14th from which time to the present there has been but one case of diphtheria from this school. (There were no cases between May 11, the date of the reading of this paper, and the end of the school year, June 16.) These results, it seems to me, are self-evident and to the credit of systematic school inspection, in spite of the many adverse criticisms, some of which, I am sorry to say, came from medical men. The question was raised whether or not an examination of a like number of cases taken at random from the streets would have given the same number of positive cultures. Granted that this is possible because of the statistics of Park and Beebe<sup>2</sup> and other investigators, who found the bacilli present in about 2 percent of persons not exposed to the infection, it must be kept in mind that an institution was under consideration and that a thickly populated school, where pupils come into very close contact with one another, forms an ideal condition for the spread of bacteria by the droplet method of infection, to say nothing of the justification of such a procedure should it result in only the saving of a single life.

Carriers should be isolated under strict quarantine and local treatment instituted until two negative cultures, not taken on successive days, have been obtained. The various gargles, sprays and local applications each have their champions. It really makes little difference which method of treatment is used as long as the desired results are achieved. That method should be chosen which best adapts itself to the case in hand. At the Madison Contagious Hospital a gargle composed of equal parts of 95 percent alcohol, saturated solution of boric acid and hydrogen peroxide gave very good results. Some clinicians advocate a spray of a 24-hour boullion culture of staphlococcus aureus or lactic acid bacillus. The diphtheria bacilli are killed because they will not grow in symbiosis with either of the other organisms. All superficial diphtheria bacilli are thus eliminated but not always those lurking in the deeper tonsilar crypts.3 This fact must be kept in mind when rclease cultures are made from those cases treated by this method.

We know that 70 percent of the deaths in the United States are due to contagious disease and that the vast majority of contagious disease cases arise in schools.<sup>4</sup> It has been estimated that skilled school inspection probably reduces the deaths from contagious disease by 50 percent, and the total number of contagious disease cases by 75-80 percent.<sup>5</sup>

At this point may be corrected an idea that at least some practitioners entertain, that the school medical inspector is infringing upon their territory as family advisers. This is erroneous. Such a physician sees conditions which the family adviser ordinarily does not see, either because of the lack of symptoms or because the condition is in the pre-symptomatic stage. The inspector makes his examinations and then his recommendations to the parents. The parents, in turn, invariably go to their family adviser for further consultation and verification. Thus, apart from its advantage from the standpoint of public welfare, it is a commercial stimulus rather than a detriment.

The examinations of the throats were hurriedly made and consisted chiefly of taking swabs from the tonsils with the idea in mind to get at the source of the diphtheria infection as quickly as possible. However, a summary of the pathology observed is of interest. Of 276 pupils examined, 114 or 41.4 percent had normal throats while 169 or 58.6 percent had pathological throats. Of the latter, 84 or 51.8 percent or 24.2 percent of the total enrollment had active sore throat or gave a history of having had sore throat within two months.

Both tonsils were moderately hypertrophied in 17 cases. In 14 they were hypertrophied to practically fill the entire pharynx. In 10 cases there was moderate to extreme hypertrophy of both tonsils with injected, ragged or scarred surfaces or discharging cheesy material from their crypts, evidence of active inflammation or the results of previous inflammation without hypertrophy. In 25 cases one tonsil was similarly affected. As stated above, two cases had diphtheria tonsilar membranes which gave positive cultures, while seven cases had suspicious membranes which, however, gave negative cultures.

## SUMMARY.

School medical supervision and inspection is doing a great work for public welfare in general,

and deserves the united co-operation of everybody, especially the medical profession.

The greatest factor in the spread of infection in any community or associated group is the germ carrier. Therefore, in every epidemic carriers should be sought, isolated, and treated.

In conclusion, I wish to extend my appreciation and thanks to Dr. W. D. Stovall and his associates of the State Laboratory of Hygiene by whom the bacteriological work was done.

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Two Cases of Plumbism from Unusual Sources. A. J. Hall (Lancet, October 2, 1915), after calling attention to the often neglected examination of the gums, reports two cases of lead poisoning in men, in both of which the attacks of eolic had been diagnosed gall stones.

His first case was a steel melter, a man who did not use lead in any form at his work. He had been suffering for over a year from "gastric attacks" and constipation. Recently he had had some vomiting. Nothing abnormal was found in the abdomen. There was a well-marked blue line on the gums. It developed that he was accustomed to drink "horehound beer" purchased at a corner store. The proprietor had recently stored the drink in casks in the cellar and pumped it up through piping to the bar. "Beer" drawn from the tap contained one grain of lead per gallon.

The other case was even more unusual. A man of 41 had for two months had attacks of abdominal pain. The history was vague, and examination revealed nothing at first. More careful examination of the gums shows in one or two places lead granules. It was thought to have come from new piping. Eleven months later, the man was sent to Hall, with diagnosis of gall stones and tremors suggesting multiple sclerosis. The man was emaciated, and had incomplete musculo-spiral paralysis of the right side. There was a marked blue line on the gums. He was accustomed to carry lead bird shot in the right hand pocket of every vest, in order always to have shot handy to use in a rifle with which he killed birds in his garden. Examination of the pockets revealed that they contained considerable amounts of almost pure lead dust.

The author comments that it is essential to make the examination of the gums with a lens, and to seek in out-of-the-way places for the source of the lead.

L. M. W.

PHYSICAL EDUCATION AND ITS RELATION TO MEDICINE.

BY CARL B. SPUTH, M. D.

LA CROSSE, WIS.

### INTRODUCTION.

From the earliest records of the Persians and Greeks, we find bodily training playing an essential part in the education of youth. As no written records were left the only thing which we rely upon are the statues and carvings which have been kept. These show that the children danced and played ball games, and that the work of the men consisted in preparing themselves for war, protecting themselves against wild beasts, shooting arrows, swimming, sparring, running, jumping, and the like. The Greek motto was: "For man, strength, for woman, grace;" and this is very well brought out in their statues.

When Christianity came into prominence, we find that physical training was sadly neglected, but was again revived during the middle ages in the form of Knightly tournaments, fencing matches, and athletic festivals. The work was taken up during the seventeenth century in Germany and was introduced in modified forms in the schools of Norway, Sweden, Denmark, Switzerland, France anl England.

In America the German system was first introduced in 1825 in Northampton, Mass., by Dr. Beck, afterwards professor of Latin at Harvard. Generally speaking the Americans have done very little to contribute toward physical training, but have for a long time been absorbing by inheritance, immigration, imitation, and natural selection the various methods of the work as practiced by the European nations. What America most needs is a happy combination which the European nations are trying to effect, the strength-giving qualities of the German gymnastics, the active qualities of the English sports, the grace acquired from the French (Delsarte) calisthenics, and the beautiful poise of the Swedish free movements, all regulated, systematized and adapted to our peculiar needs and institutions.

In the primitive ages, physical strength and en-

durance were highly prized, but the changes wrought by modern civilization have weakened the races considerably. Steam, gunpowder and electricity are now doing the work, and while it has increased the power of man in one way it has rendered him weaker physically. Happily the country is awakening to the importance of the training of the body as well as the mind, and in many places along with the hospitals, sanitariums, and asylums, gymnasiums have been erected, still carrying out the old idea that if the body is strong, the mind shall be also. The great playground movement has awakened great interest in the country, and it is wonderful to note the results which have been attained, especially in the larger cities where the poor children are cared for and kept from the dirty streets and tenement squares.

The aims of physical training may be included under four general heads, namely: hygienic, educative, recreative, and remedial or corrective. The aims from the hygienic standpoint embrace a consideration of the normal proportions of the individual, in order to determine normal growth and developmment; something must be known of the anatomical structure of the body, and the physiological functions of the various organs, a study of the ordinary agents of health such as exercises, diet, sleep, air, bathing and clothing; perhaps of the climate, occupation, history, temperament, and inheritance of this individual.

Educative physical training aims to cultivate those special powers of mind and body which enable the individual to acquire some skillful physical accomplishment, e.g., swimming, skating, fencing, boxing, tennis, golf, apparatus work, dancing, etc. In other worls, to train the muscles so that they will respond quickly and accurately to the stimulus of the will—that is, to develop coordination. Most of these exercises involve the training of the special senses, the brain and central nervous system as well as the muscular system. The aim in every case should be to maintain a proper balance between the mental and physical forces.

The word "recreation" when applied to the body means a renovation of the vital energies. Most games are played for fun or for the recuperative power there is supposed to be in them.

The remedial (passive exercises) aims are shown in the efforts made to restore disturbed functions and correct physical defects and deformi-

<sup>\*</sup>Read before the La Crosse County Medical Society, April, 1915.

ties. The former efforts are termed "medical gymnastics" and the latter "corrective." Through medical gymnastics attempts are made to treat such diseases as anemia, rheumatism, jaundice, sclerosis, neuralgia, constipation, hysteria, and many others. In the latter, efforts are made to counteract drooping head, round shoulders, flat chest, hollow back, curved spine and such defects derived from improper carriage. Briefly the chief remedial aims of physical training are to improve the functional capacity of the important organs, to increase the general nutrition of the whole body, to correct deformities, and to elevate the individual to a higher plane of living.

The means employed for acquiring these various ends may be summarized under the following heads: First, free exercises and marching exercises; second, apparatus exercises; third, athletic sports; fourth, plays and games; fifth, developing appliances. Much has been done in the schools, colleges and universities in regard to physical training, perhaps more in the sporting and spectacular side of athletics. The so-called "training" which the men receive in preparing themselves for the feats which they are to perform helps not only to build up the physical side of the man but also the mental, involving the will, and helps to make a man of fine character. The question of physical fitness, of being able to keep in condition for work or for pleasure is a matter which is greatly slighted by the American people. of the European countries, particularly Germany, England, Norway and Sweden, as nations greatly surpass us in this respect; nearly all the great political and legal leaders, have not only been men of intellectual qualities but have trained their bodies as well as their minds. Our schools and colleges have turned athletes in the wrong direction. They have cared for the spectacular side, and sadly neglected the hygienic and educational aspect.

To determine the relation between Physical Education and Mcdicine is one of the problems of today. Some medical practitioners decry the opinions of men of Physical Education and its effects produced by physical training, while some physical directors, enthused with its benefits, claim that it is a substitute for all remedial agents. These two factions represent the extremes, the cuthusiasts of each profession and, though the man holding to either of these ideas may have gained a

reputation in his circle, it is the narrow view, for both Physical Education and Medicine are intimately related, they go hand in hand assisting one another and the thorough understanding and knowledge of both will increase a man's efficiency in assisting his fellow men in alleviating disease. The biogenetic characteristics of the cell should always be the primary consideration and anything which influences this property should be one of the weapons used against the devastations of disease.

Is it any wonder that reputable physicians are very conservative in lauding Physical Training when so many advertisements appear daily in our leading magazines and newspapers for the cure of "what ails you" by the physical methods, mechanisms or manipulations? According to such posters, anyone can become strong, anyone can regain health, the fat one can be made thin and the thin can become fat, and I know not what else. Should the public, and more especially the physician, judge the usefulness of this work because of such abuse? Are there not quacks in every profession? Is quackery to be the standard for the judgment of the application and usefulness of anything?

The growing importance of Physical Training throughout this country and abroad leads us to ask the question whether it is a fad which will die out in a few years or whether it will grow until it becomes an integral part of everyone's life, in the school, in the college and in the commercial world.

As stated before, bodily training played an important role in the education of the ancients. At five years of age, the Greek lad was taught to swim, and at seven, athletic and gymnastic exercises, which later were practiced in the national games. It is to be noted that the physical took precedence over the mental development, in fact there must first be life before there is a necessity for a nervous mechanism to control that life. As soon as the mcn became effeminate the supremacy of Rome dwindled. It seems that the power of a community bears a direct relation to the physical development of the individual and that exercise is directly proportional to the congestion of the state. This is an important fact and one not to be overlooked that the adoption of physical exercises in both ancient and modern nations bears a direct relation to the population of the community.

From these observations it is easy to deduce that Physical Education supplies some need, something

which an individual requires, something that he feels a lack of but cannot ordinarily explain in words. Little does the man imagine the value of his words when he says, "I must get more exercise, I have been confined too closely by my business, I need to get out in the open air and am going to take a couple weeks hunting." This inherited tendency for exercise should be heeded, for if it be disregarded his constitution and body will eventually adapt itself to its environment, perhaps to the detriment of his somate vigor, of his power to do work, of his resistance to disease and of his future offspring. It has been stated that strictly city dwellers lose their vitality in three generations and though this may be extreme, still it is undoubtedly a tendency which we must realize and prevent. Later we shall have occasion to refer to this more in detail, but for the present suffice it to say that man has attained his present morphological characteristics by overcoming his environment, and Physical Education is the rational and scientific means of supplying that work which has been instrumental in developing the trade to its present standard.

The state of mind affects the condition of health and an individual can think himself into a disease. Pseudocyesis is a most notable example of this influence of the mind. The condition of health also affects the mentality and the cerebrum is not capable of performing the same quality of work when some morbid process is present. In early times this was recognized and we have the ancient but true maxim, "A sound mind in a sound body."

Physical Training is not a fad for it supplies a want and it will continue to grow and advance, especially in our cities, in direct proportion to the population of the community. In rural districts it is not so necessary for there we still may see the variety of occupation that takes its place.

Especially does it find a place among our city children, who are in school many hours of the day and during the remainder of the time are restrained by too careful parents for fear of contamination and accidents. The children who most need physical work in the open air and sunshine for the process of development are debarred from its influence. This seems to be one of the results of progress and civilization but it might be offset by numerous well sun-lighted gymnasia and playgrounds where children could play unrestrained and secure that physical growth and vigor which

characterized their forefathers. Most of us have had outdoor work in our childhood, but progress has been so rapid that this is almost impossible for the child of today. Primarily then, it is the children, whom we must provide for, for it is upon the children we must depend for the government, protection and perpetuation of the race.

It is not so very strange, then, that Physical Education has been inaugurated is many of our schools. Now, no new school building is considered quite complete without its gymnasium. In the vast majority of cases, schools, until recently, have simply been brain trainers, in many cases into a higher development of mentality to the detriment of other functions.

Too often, students and parents have the preconceived idea that their classes in Physical Training are merely to utilize spare hours and to fill in time, that it consists in lifting heavy weights and in performing difficult feats, and that it requires a great amount of strength. Ordinarily, the very pupils who have had the least amount of outdoor activity are the ones who endeavor to shirk, while the ones who are not nearly so much in need of exercise are the ones who must be restrained from over-exertion by the teacher in charge. Frequently the parents request that their children be excused from this work and even secure letters from the family physician stating that they are physically incapacitated for gymnastics. Coupled with this we often find a lack of enthusiasm on the part of the teacher as well as incompetence, and so the very individuals who need it most are excused. The parent, the physician and the school are responsible for the child and they have combined to allow it to follow its own inclination in a matter of vital importance to its future life, to the state and to the race.

Teachers of physical training today are trained in medical branches necessary for an understanding of their profession. They are not old-styled acrobats—their aim is not to develop professional athletes or specialty performers for amusement of the public, but to make better men and women, who shall be a greater use to the community.

Physical Education may be justly ranked as an important science of the future, if not of the present, meriting further consideration and investigation. It has an educational principle, a hygienic application and a remedial value. In its various forms, it will act as a substitute for that work which has developed man to his present

standard, strengthening the musculature, developing co-ordination, and increasing the motor pathways and motor nerve cells. It counteracts many of the evils of dress, of eating, of noxious habits, and of environment, which enhances the somatic vigor of the race; and it stimulates metabolism—so that the cellular activity being increased, the immunity of the individual is raised.

On the other hand, lack of exercise of any part tends to degeneration and atrophy. With all the modern inventions and specialization of labor, certain functions are hyperdeveloped at the expense of others, which in turn become more liable to degeneration and infection. In all probability this plays an important role in the contracting of certain diseases; and as surely as it does, by the gradual exercising of the atrophic part with an increase in the metabolism of the cell, the morbid condition will be improved.

How do these principles interest the practitioner of medicine? Is it not his duty to minister to the people mentally, morally, socially, and physically? Is he not the purveyor of health hints? Is not Physical Training a means of raising an individual's immunity? Is it not his duty, therefore, to familiarize himself with the systems, and uses of this science? Is it not his duty to investigate the work now being done along this line-giving his support to those worthy of it and directing his energies to make it more useful by educating the public? His words are the ones to educate the laity along the lines beneficial to health. His duty does not end with advising a mother as to the proper feeding and clothing of a child, but should include advice as to the necessary outdoor life which will have so great an effect upon the child's future. Some claim his duty extends even farther, it embodies the education of the boy or girl, and investigation into the school system and especially the system of Physical Education of the school which the child attends, and suggestions to the proper authorities for its improvement so that a better, stronger, healthier boy or girl enters life's work and is able to perpetuate the best type of manhood.

The Physician and Physical Director are crusaders against the ravages of disease. They should join hands and work more in harmony and unison to increase the physical efficiency and the immunity of the community and so, make a better, healthier and happier race.

## BONE TRANSPLANTATION IN DEFORMI-TIES OF NOSE WITH REPORT OF THREE CASES.\*

BY F. S. COOK, M. D.,

EAU CLAIRE.

In giving a report on transplantation of bone in the nose it would be well to refresh your mind on the subject of nasal deformities. We have the several varieties, viz.:

- (1) Crooked or twisted nose. This is a type of external deformity in which the nose is bent to either side.
  - (2) Hooked or beaked nose, which may be



Figure I, Case 2. Before operation, one year after injury.

congenital or acquired in very early life by a high arched palate, which is the result of mouth breathing.

(3) The Saddle nose is most common and is the one which we are usually called upon to remedy. As a rule, it is usually the result of Trauma, Abscess of Septum, Syphilis, Tuberculosis, and since the introduction of the Submucous Septum operation we have seen a few of these as the result. It follows this operation when it is done during the active stage of syphilis or when there is an

<sup>\*</sup>Read before a joint meeting of the Chippewa and Eau Claire County Medical Societies.

infection following this procedure or by dislocation downward of the cartilage or keystone of the nose during the operation. I think that we hear more of this from a few sporadic cases than we actually see in practice.

To make the classification complete we will have to add Flat nose, the Broad nose, Pinched nose, Pond nose of the Germans and absence of nose either congenital or due to syphilis or tuberculosis, etc.

Now for all practical purposes this classification



Figure II, Case 2.

Transplant in position. X-ray plate, one year after operation.

can be simmered down to the nasal deformity without loss of bony structure and that with loss of structure.

The first is amenable to immobility or resetting with splints. The second to the reconstruction with various materials as paraffin, celluloid and, lastly, transplantation of bone.

The use of foreign substances as celluloid, rubber, metals, etc., was at first attempted but soon given up on account of the sloughing that always occurred. The next is paraffin and is still used to a large extent in certain types and is very good. A brief history of this method might be of advantage at this time. Paraffin was first injected in cases of hernia to strengthen the rings, the exact date I do not know, but many years ago. Gersuny of Vienna in 1900 was the first to use it in the nose. His method was to inject it in the liquid state with a melting point of 115 degrees F. It was next taken up in this country by Harman Smith of New York who still adhered to the liquid injection. In a few years there began to be reports published of cases of amaurosis or blindness caused by emboli in the intraocular opthalmic veins. Harman Smith then advocated the method of injecting the paraffin in the solid state, thus doing away with this danger. There are certain cases of deformity with loss of the bony framework of the nose where there is no foundation to build upon with paraffin. These are the cases where the bone transplant is useful; in fact to me the use of paraffin is limited to very small and sharply defined deformities about the bridge. I think a much better nose cosmetically can be made with a transplant. Here is another point to bear in mind and I think every man who has done much of this work will bear me out. A patient with a paraffin repaired nose is never satisfied. He is always coming back wanting a little more here and a little taken out there.

All due credit must be given Dr. W. W. Carter of New York for the pioneer work is transplantation of bone in the nose. In 1910 he reported his first case with the technic which today from a surgical standpoint is far ahead of the later ones devised by other men. A brief review of this is as follows: The usual preparation is performed of shaving the evebrows and using Tr. Iodin over the nose and forehead. A curvilinear or V incision is made starting one-half inch external to the nasal frontal angle and carried down to the bridge of nose. Then there is a similar incision from the other side meeting the first. This is carried down to the periosteum but not through it. This forms a tongue-like flap with apex down and is then dissected up over the frontal process. Carter then dissects up the skin over the nose with a sharp knife, but I have found that it is made much easier and with less danger of button-holing the skin by using a blunt curved Mayo dissecting scissors. The skin must be elevated clear to the tip

of the nose and well down on the sides and in some cases it is necessary to go down on to the cheek. Next the periosteum must be incised at the junction of the nasal with the frontal bones and elevated for a space of one-half inch. Next a piece of ninth rib, preferably on the right side, about two inches long is split with the periosteum attached, the cancellous part scraped with a curette, shaped to size and inserted under the skin to the tip of nose. Then the upper end is slipped under the periosteum. I place one catgut suture on each side of the transplant in the periosteum. This seems to immobolize it so that it has a better chance to form a union with the frontal bone. The skin is then sutured and a pad dressing placed over the incision. The patient is usually up the



Figure III, Case 2.
One year after operation.

fifth day and the stitches are taken out, but he is cautioned not to touch the nose and by all means to avoid injury.

## CASE REPORTS.

Case 1. Mr. M. A., referred by Dr. O'Connor, came in May 5th, 1914, with following history. Three years previous had had nose fractured with infection following. Male, age 21, family history negative, denies syphilis. General examination shows well nourished man, findings negative. Presented a nose that was a typical Saddle type de-

formity. Ends of nasal bones destroyed, also cartilage with depression that you could place a finger in. Septum mucosa sagging on both sides obstructing nasal respiration. Transplant made following the previously described technic. No reaction, patient up in five days and discharged in ten days. I have not seen patient since but have had frequent reports from his physician, who says it is getting along nicely and that he has a straight nose.

Case 2. John C., referred by Dr. Midelfart in July, 1914, with history of fracture of the nose about one year previously. He had loss of the bony framework. Report on physical examination negative. Nose: Nasal bones were spread and anterior end of nasal bone and cartilage destroyed. Septum sagging with nasal obstruction. Transplant made with bone from ninth rib, inserted to the tip of the nose, skin dissected free down on cheek. Bone firmly anchored under periosteum. No reaction and the next day patient remarked that he could breathe better. Stitches removed on the fourth day, up the fifth and at work in two weeks.

Case 3. William B. presented himself for the first time December 7, 1910, with a history of having nose broken when a youngster. Family history negative. Nose presented a combination of a twisted and a saddle nose deformity. The concavity was to the right with a loss of tip framework. Septum was split and left side obstructing the nostril. Left side of septum was resected at that date and the concavity filled solid with paraffin. The results were not very satisfactory and at different times I added more paraffin and succecded in getting a beautiful red nose for him with good nasal breathing. On January 7, 1915, he presented himself and wanted to know if I could improve his nose. The next day I transplanted a piece of rib. It will interest you to know that in making my dissection all of the paraffin was removed in its virgin state with a curette and I did not see any evidence of absorption or fibrous invasion of the mass after about five years of its residence in the tissue. The skin was raised over the cheek and to the tip of the nose and the transplant inserted. The transplant did not extend up under the periosteum quite enough but I sewed the muscle tissue over it as well as periosteum. There was no reaction, stitches taken out in four days, patient up the fifth and discharged in ten days. The saddle part of the deformity was perfectly repaired but I was not able to overcome the twisted deformity and this will have to be repaired with a mobilizing operation later. I think that this case clearly demonstrated that the twisted deformity without the loss of structure is more amenable to the mobilizing operation while the saddle variety is the typical case for the transplant.

#### SUMMARY.

Dr. Carter has run a series of cases of transplanting with the periosteum and without. He has found that the ones with the periosteum do better and seem to give more rapid growth. The transplant attached itself to the frontal bone. The X ray has shown that there is a line of rarefication extending through the center of the transplanted bone and no doubt this is the beginning point of absorption. The periosteum of the frontal bone we know is osteo-genetic and the supposition is that the transplant acts in an osteoinducive manner. The bone cells are thrown out around the transplant at the upper end and gradually travel down. The bone is absorbed from the center out.

If this is true we have an entire new growth of the transplant. The bone should be anchored under the periosteum as there it gets its osteogenetie properties. In my series of three eases I found that there was practically no reaction, no redness of the skin or swelling. In paraffin work about the nose there is almost always a redness due to the fact that the skin is not loosened up for some distance around it as is done in the bone work. Strict asepsis must be maintained. The graft should not be touched with the hand nor should sponges be introduced in the subcutaneous incision of the nose. The skin should not be button-holed as it increases the danger of infection. The skin should be dissected up to the tip of the nose, also the graft should be introduced to the tip of the nose.

The transplantation of bone in deformity of the nose with a loss of structure is the ideal procedure and far superior to paraffin. The results are better and more permanent. Some men say that paraffin is absorbed and replaced with fibrous tissue but I have had opportunity to remove it in a few cases. Some of it had been placed in the nose five years previous and I have found it in its virgin state.

## A CASE OF THROMBO-ANGEITIS OBLITERANS?

BY EDWARD EVANS, M. D.,

#### LA CROSSE.

Jno. L., age. 57, American, merchant, entered hospital December 31, 1915, complaining of pain in right foot. Family history negative. Personal history without bearing on present illness except that he has been a heavy smoker (not cigarettes) and a lover of sweets. Has taken only occasional drink and habits good, never had lues (Wasserman neg.). Six years ago had colloid goitre removed.

Present illness.—Four years ago had pain in great toe of right foot lasting four or five weeks and then disappearing without any complications. Two years ago had pain in toes of left foot so severe that he was in a sanitarium and was treated for "neuritis" for several weeks.

Six weeks ago toes on right foot began to feel numb. A few days later he had pain in right knee a couple of days and next day he had pain and burning in right foot. Pain got severe and in about two weeks he noticed foot was blue and slightly swollen, numb and with burning sensation. At this time he entered a sanitarium and was treated for "neuritis" with massage baths, etc., and a few days before coming to hospital, outer part of foot became black and small toe was amputated.

### CONDITION ON ENTERING HOSPITAL.

Large man, weight 200 lbs., face congested with many venules, no arcus senilis, tongue tending to dry. Both feet purplish, no pulse palpable in either posterior tibials or popliteals, no arteriosclerosis in radials or temporals. Left foot and toes warm; right foot and leg cold from middle of calf, where a whitish band is seen as if a string were tied about leg. Whole foot is purplish except outer half, which is black and blistered and gangrenous and little toe removed. Foot is very sensitive.

Heart is normal, pulse 90, blood pressure, 146 syst. 90 dias. Lungs normal, temp. 100°, urine 1000 c.e. first twenty-four hours, S. G. 1010 slight albumin, no sugar, some granular easts. Bowels constipated, appetite poor. Blood, Hb 90% R.B.C. 4,080,000 W.B.C. 18,000. Smears negative. Blood coagulates rapidly, very viscous. Course in hos-

pital: He lived less than one week, with very considerable fever, and general appearance of sepsis, and at no time did it seem wise to amputate leg. Foot was dressed aseptically, and he was given 1,000 C. C. normal salt solution subcutancously. Next day, January 1, 1916, line or band has disappeared from right leg, and it is warmer. Left foot a trifle warmer and he asserts pain has been less. 1,000 C.C. salt sol. as before. January 2nd, says pain is gone. All blueness gone from left foot. It is of normal warmth and the pulse is felt in popliteal, posterior tibial and dosalis pedis. Right foot as yesterday not painful and leg a better color. Condition of legs and feet continued as above till death, January 5th, and there was no return of pain, and it was interesting to note in examinations of blood subsequent to first day that it flowed with much greater ease; was given 1,000 C.C. salt sol. daily, till day before death.

### REASONS FOR DIAGNOSIS

- 1. Absence of arterio-sclerosis, enlarged heart, or high blood pressure.
- 2. Clinical observation of viscosity of blood and the decrease of this under hypodermoclysis.
- 3. Remarkable change in appearance of left as well as right lower extremity and the return of pulsation in arteries of former, under hypodermoclysis.
- 4. The history of the case for past four years, with symptoms of arterial obstruction first in one and then other foot.
- 5. The findings are not those of an interstitial nephritis, with arterio-selerosis causing gangrene.

## PUBLIC HEALTH SERVICE HOSPITALS CURB TRACHOMA.

The establishing of small trachoma hospitals in localities where this contagious disease of the eyes is prevalent presents the best solution of the trachoma problem, according to the statement contained in the annual report of the Surgeon General of the United States Public Health Service. The Service now has five trachoma

bospitals in the three states of Kentucky, Virginia and West Virginia, and so great has been the number of applicants for treatment that a waiting list has been established. In the past fiscal year 12,000 cases of trachoma have been treated, the larger proportion of which were cured, while those in which a cure was not effected have been greatly improved and rendered harmless to their associates. The great majority of these trachoma patients were people who lived in remote sections far removed from medical assistance, and who, but for the hospital care and treatment provided would have remained victims of the disease practically the remainder of their lives.

"When it is considered," the report of the Service states, "that thousands of persons suffering with trachoma, a dangerous contagious disease, would otherwise remain untreated, It is realized how far-reaching results have been obtained through these trachoma hospitals and the other public health work done in this connection. It would be impossible to estimate with any degree of accuracy the number of people who have been saved from contracting this communicable disease by thus removing these thousands of foci of infection."

In addition to treating persons with the disease the hospitals have been used for educational work. Doctors and nurses have visited the homes of the patients and have explained how to prevent the development and recurrence of the disease. One thousand three hundred and eight such visits were made during the year in Kentucky alone. "It has taken some time," the report continues, "to educate the people afflicted with this disease to the importance of cleanliness and the use of simple hygienic measures in their daily life." That results have been obtained is evidenced by the noticeably better observance of hygienic precautions by those among whom the work has been done.

In addition to the hospital work, surveys were made in 16 counties in Kentucky, especially among school children. Eighteen thousand and sixteen people were examined, 7 per cent, being found to have trachoma. Similar inspections in certain localities of Arizona, Alabama, and Florida resulted in finding the disease present in from three to six children out of every hundred. Periodic examination of school children for the disease and the exclusion of the afflicted from the public schools, are two of the recommendations the Public Health Service lays emphasis upon.

One of the special features of the trachoma work was the giving of lectures and clinics before medical societies in various counties where trachoma hospitals could not be established. Patients were operated upon in the presence of physicians and the most modern methods of treatment demonstrated. Throughout, the purpose has been to stimulate local interest in taking up the campaign to eradicate trachoma.

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## **EDITORIALS**

## SOME FEATURES IN THIS NUMBER.

To some there may seem to be almost too much about tuberculosis in clippings and abstracts in this number. Well, the answer is that as long as the disease is so widespread and has its roots so deeply planted in our "unsocial" system, we must be continually reminded of its existence lest we fall easily into the reave-well-enough-alone attitude. The tendency of the majority of people who find an intolerable situation is to become hyperactive in attempts to remedy it. Should there be great difficulty, however, in overcoming unforeseen obstacles, they tire easily, become eventually bored at the name of their crusade and sit back to bewail the age in which they live.

Now we are living in a great age, probably the greatest age of the world's history and the rewards of labor are only for the "stickera." The reason why the world is in general a more healthy place to live in is because men have not grown weary in making it better. They have not been discouraged when perfection has not been attained or ideals have not been realized.

Every active, vigorous movement has had to employ exaggerated means to catch the dully attuned public's ear. This is unfortunate. In the ease of the tuberculosis propaganda it has caused many to have acute and chronic phthisiophobia, it has ostracised many an afflicted person, it has gone to the extreme in frightening people. Now a more rational viewpoint must be obtained. Our knowl-

edge of the modes of infection and times of greatest susceptibility are clearer today than they were a few years ago. The collapse of the outrageous newspaper-aided hoax, the Friedmann cure, should more firmly establish us in the confidence of the people and we should act as teachers as we go about our work.

Tuberculosis is a common disease, probably the most common year-in and year-out disease. In teaching students for the past ten years how to recognize the early cases and in insisting on the extreme frequency of the disease I fear that I have swung the pendulum too far so that I have noticed a tendency to diagnose as incipient pulmonary tuberculosis cases which were very questionable and those which had not sufficient data for positive diagnosis. Possibly it is best to err on the side of calling every suspicious case, where symptoms and signs are present to greater or less extent, incipient. Surely to wait for the presence of bacilli in the sputum before making a positive diagnosis is not far short of malpractice.

Two years ago Dr. Dearholt at the Oshkosh meeting called attention to the discrepancies in diagnosis before and after patients entered Wales Sanatorium. Granting that there are many inherent errors in such a statistical study, yet there was proof enough of incorrect diagnosis of the stage of the disease to make us reflect.

Also we want to call attention to the brief opinion by Dr. Paul Lewis, a recognized authority, on the most important question of the periods of greatest susceptibility to tuberculosis.

Finally, we should like to know that every

physician throughout this whole land will read the Autobiography of Dr. E. L. Trudeau, a review of which will be found elsewhere in this number of the Journal.

## COUNTY SOCIETY PUBLIC MEETINGS.

T the mid-winter meeting of the council held recently it was suggested that every County Society hold one meeting during the year to which the public would be invited. The program for such a meeting would necessarily be popular in character and would treat of some subject of interest to the layman as well as to the doctors. We can think of no better plan to get the County Society in touch with the people of the community. A subject which we would respectfully suggest is Cancer. Should no member of a society care to discuss the subject or should the society feel that more interest might be created by having some outsider give a lecture, we feel sure that there are men in this state and neighboring states who would gladly give the talk. We urge the County Societies to ponder over this suggestion. The day has long since passed when we can stand aloof and look down upon the benighted layman. As a matter of fact, some laymon are better informed upon some problems in medicine than many physicians. It is to the interest of all to come closer together and lessen the breach which seems to separate us from the public.

The more we take the public into our confidence and show them what we are trying to do to help them to keep well, the easier it will be to obtain rational legislation in medical problems.

## PITUITARY FEEDING AND GROWTH.

A S time goes on we are coming to the realization of the manifold regulatory processes of the body by means of chemical substances secreted into the blood stream by the so-called endocrine glands. The work of the past few years has wonderfully enriched our knowledge of the interrelationship among the various glands of internal secretion. The problems are so fascinating, and what we actually know is so marvellous, that it is but a step to speculation and bizarre hypothesis. Therein lies the pitfall for those who seek to explain all bodily processes on the basis of reactions among the endocrine gland series.

The pituitary gland (the hypophysis cerebri)

seemed to offer insurmountable obstacles to experimentation. Interest was aroused in the last half of the recent century by the observation of Marie that acromegaly and tumors of the pituitary gland often occurred together. He argued from this that acromegaly was a disease caused by destruction of the secretion of the hypophysis.

Although others had succeeded in experimentally removing the pituitary gland, it is to Cushing and his associates that we owe methods of approach to the gland and observations upon the removal of a portion or all of the gland which have profoundly changed our conceptions and added new concepts.

Thanks to the careful work done at the Hunterian Laboratory, we now have some very definite knowledge of the diseases due to lack of the pituitary secretion.

There are three parts to the gland: a pars anterior developed from the epithelium at the roof of the mouth, a pars intermedia, and a pars nervosa or posterior developed from the brain. It would appear that there are two distinct secretions, one from the anterior lobe and the other from the posterior lobe including the pars intermedia. The secretion from the anterior lobe enters the blood stream directly, that from the pars intermedia travels through the posterior lobe and both enter the cerebro-spinal fluid.

The changes produced by hypopituitarism are of two kinds, depending upon the age of onset. If the lack of secretion occurs before puberty there is seen the bodily change called by Bartels and known as Fröhlich's syndrome, dystrophia adiposogenitalis. In such a case the secondary sexual characters fail to develop, the genitalia are undeveloped, the male shows the bodily configuration of the feminine type, the breasts are large, the pelvis is broad, the beard and pelvic hair are scanty. In women there is also scanty growth of pubic hair, possibly a masculine type of body, small breasts, increased hair on face and extremities and deep voice. Disturbances of menstruation in the female and of libido in both sexes are not infrequently seen early.

If the disease sets in after adult life, there is retrogression of the sex characters, impotence, amenorrhoea, loss of pubic hair, tendency to adiposity, subnormal temperature, and mental lassitude. It is interesting in this connection that Cushing attributes the state of hibernation to a periodical lack of secretion of the pituitary gland.

Hyperactivity of the gland produces also dis-

tinct changes, chief of which are gigantism and aeromegaly. Before puberty, hyperactivity may express itself in precocious sexual development with increased *libido sexualis*. In adults carly polyuria and polydipsia with either glucosuria or lessened sugar tolerance may be seen in acromegaly. Later, as the posterior lobe atrophies, there is increased sugar tolerance and on the atrophy of the anterior lobe, lessened or lost sexual power.

Curiously enough the relation between the true sex glands, ovaries and testicles, and the pituitary body is very close. Castration produces hypertrophy of the hypophysis. The partial gigantism of the eunuchs, adipose feminine type of body with unusually long legs and arms, has been known for hundreds of years. The reason for this change in the bodily figure has only been understood since the research on the pituitary gland.

Hypopituitarism can be experimentally produced now in all its stages. Attempts to produce hyperpituitarism by gland implantations and stimulation of the glands has been unsuccessful.

Recently Goetsch\* has published the results of his experiments of feeding rats with anterior lobe, posterior lobe (including the pars intermedia), and whole gland. His conception was "that if hypopituitarism results in retardation or cessation of body and reproductive development, then one may expect increased growth and increased rapidity of sexual development from the administration of pituitary extract." His report details the changes which take place in the growth, sexual development and reproductive powers of rats, together with the histological changes which take place in the ovaries and testes. His results leave little room for doubting the intimate relationship between the pituitary body and the sex glands. He finds that the feeding of the dried powdered extract of the whole gland to young rats in excessive doses is highly detrimental to growth and development and produces increased peristalsis and certain nervous The latter symptoms, he conmanifestations. cludes, are produced by the posterior lobe portion because they occur when only posterior lobe substance is fed. On the contrary, when proper doses of either the whole gland extract or the anterior lobe portion are fed to young rats, certain definite

changes take place. In both sexes there is remarkable growth of the sex glands, ovaries and testes. The animals grow faster than the controls, become sexually mature carlier, and breed earlier and more often. These gross changes are accompanied by microscopical evidences of maturity in the sex glands, active ovulation and Graafian follicle formation and extremely active spermatogenesis. "All these developmental structural and functional changes in the sex glands of both the male and the female, produced by the feeding of pituitary extract, show an extremely selective and almost specific action of the latter upon the genital system."

A further most interesting result concerned the stimulating effect upon the offspring in intrauterine life and during lactation. Feeding of extract to the young after weaning had "an even greater stimulating effect upon growth, weight and development." There was earlier and more frequent breeding, and an increased number of offspring in the litters.

These experiments are not only extremely interesting but also are of great importance at the present time when so much that is hypothetical and theoretical surrounds the action of the glands of internal secretion. We do not doubt that others will be able to confirm Goetsch's results and even extend them. It would seem that now we have a rational basis for any therapeutic attempts to restore libido when sexual power is abnormally weak in an otherwise healthy individual.

Such careful experiments as these help to take organotherapy out of the realm of speculation and place it on a firm, scientific basis.

#### A CATECHISM.

Q. What is a vaccine (bacterin)?

A. A vaccine is killed bacteria suspended in physiologic salt solution to which a small amount of tricresol has been added as a preservative. The bacteria, be they typhoid bacilli, streptococci, gonococci, etc., are usually killed by subjecting them to a temperature of 56° C. (132° F.) for one hour. The number of bacteria in 1 c.c. are estimated and dilution made as desired. The vaccine before use is tested by culture in order to determine if it is sterile.

Q. What is sensitized vaccine?

A. Sensitized vaccine differs from plain vaccine in the following respects: After the bacteria

<sup>\*</sup>Goetsch, Emil, The Influence of Pituitary Feeding Upon Growth and Sexual Development. An Experimental Study. Bull. Johns Hopkins Hospital, 1916, XXVII, 29-50.

are grown they are placed in contact with immune serum produced by inoculating an animal with similar bacteria, left in the thermostat for a short while, then left over night in a cold place. Next they are killed either by heat or by alcohol, centrifuged, taken up in salt solution and the number in 1 c.c. determined. A little tricresol is added as a preservative and the sensitized vaccine is ready for use.

Q. What advantages, if any, has a sensitized vaccine over an ordinary vaccine?

A. Briefly, it contains serum plus vaccine. It thus has both passive and active immunizing powers. Its action is more rapid, the bodily reactions are claimed to be less violent, and the immunity not only begins at once but apparently lasts longer than that due to ordinary vaccine.

Q. What is an antitoxin?

A. A serum or antitoxin is quite different from a vaccine. A serum is usually the blood serum of a horse which has been inoculated repeatedly with virulent doses of a particular bacterium, diphtheria or tetanus for example, in increasing doses. When the horse shows no reaction to a dose which at first would have killed it, the horse is bled and the serum collected. This is antitoxin. It contains the immune bodies produced in the horse in response to infection with bacteria.

Now-a-days the serum is fractioned by chemical processes which concentrates it and frees it from some toxic substances present in whole serum. This globulin fraction contains al! the potency of the whole serum.

Q. What is the difference between active and passive immunity?

A. Active immunity is that produced by a disease itself through natural infection, or that produced artificially by inoculating a person with vaccine or live bacteria of low virulence. In active immunity the body manufactures its own antitoxin in response to infection. Passive immunity is that produced by injecting antitoxin into the body. In this immunity one introduces the protective bodies formed in the body of the horse in response to some particular infection.

Examples. Active immunization, vaccination with small-pox vaccine or with typhoid vaccine. Passive immunity, prophylactic injection of diphtheria or tetanus antitoxin.

Q. When are vaccines indicated?

A. First and most important as prophylactics. Second, as a means of stimulating the body cells to

produce more antibodies in subacute or chronic infections. Some use vaccines in acute infections. This we do not believe is good practice. Vaccines have been used for every sort of disease whether the actual cause was known to the physician or not. For therapeutic purposes they should be used only when there is bacteriological evidence of the presence of a particular invader and vaccine of this organism is the only one indicated.

The most consistent results are obtained in furunculosis. This disease is always due to the staphylococcus aureus, albus or citreus. It is hence not necessary (although advisable) to cultivate the organism from the pus: one can at once give staphylococcus mixed vaccine (bacterin).

Q. Are mixed vaccines ever indicated?

A. Only rarely. Now and then a combination of two bacteria may be producing a disease. Mixed vaccine, that containing colon bacilli, streptococcus, staphylococcus, gonococcus, etc., should never be given. It is modern shot-gun therapeutics and should have no place in modern science.

Q. What is antogenous vaccine?

A. Antogenous vaccine is the vaccine made from the bacteria grown from a patient and used in that patient only. There are certain unrecognizable biological differences among bacteria of the same cultural characteristics which render the antogenous vaccine preferable to the stock, commercial vaccine.

Q. What are the so-called phylacogens?

A. Phylacogen is not a vaccine, it is not a serum. It is a filtrate of the growth of bacteria which contains no immunizing or curative properties. It is a typical shot-gun mixture. There is no scientific basis for their use and they are not altogether harmless. A demand has been created for them by advertising and by the use of testimonial clinical reports which are absolutely valueless as criteria upon which to form judgments of efficacy.

In this connection we offer two quotations, the first from an address delivered by Dr. Theobald Smith; the second, the conclusions of a series of articles published in 1913 in the Journal A. M. A.

"The medical profession should see to it that vaccine therapy does not degenerate into inconsiderate and reckless experiments on human beings, that it does not create false hopes in hosts of patients and that it does not originate and end in commercialism and the desire to exploit the weak and unfortunate."

"Vaccine therapy is a highly specialized field of medicine whose successful pursuit calls for a particular training in bacteriology, immunology and clinical medicine.

"The therapeutic possibilities of vaccine therapy have been exaggerated.

"The promiscuous use of the stock bacterial vaccines of commerce in the treatment of acute and chronic infections is an irrational procedure. Ready-mixed commercial vaccines should be abolished.

"In cases suitable for bacterial therapy, autogenous vaccines are with few exceptions superior. Autogenous vaccines should be prepared by those in touch with the patient and not through the agency of remote laboratories."

#### LETTER TO THE JOURNAL.

To the Editor:—In your editorial on "Does Insufficient Education Pay" in the number for January, 1916, you show up in good shape that the osteopaths and graduates of Class "C" schools are not prepared to treat diplitheria. The question is whether the graduates of the Class "A" schools are much better prepared? There is no work that the A. M. A. has done that was better for the public than the elimination of the poor medical colleges, but before we can go much further there must be some cleaning up within the ranks.

Four different epidemics that the writer investigated during November and December, 1915, were due to the earelessness of graduates of first class medical schools and men held in good repute among their fellow practitioners.

The first case is that or a young man treated for two weeks for nephritis and a correct diagnosis was not made until a membrane protruded from the nares. The neighbors had been allowed to go in and out during this time with the result that there were two other cases of diphtheria in the neighborhood, but no deaths. The next day in another city there was a case of diphtheria which the surgeon of the town had not recognized for two weeks, and was treating it for other trouble. This case died, but there was no other known case contracted from this case.

In a progressive village a reputable physician had been treating cases of diphtheria without recognizing them. He was calling them croup, and would have continued to do so if another physician had not been called to see some of the cases and had made a correct diagnosis. These cases were diagnosed by the presence of membrane and positive laboratory reports. In this village three other families were infected and a young man who was visiting there developed a mild case after he had arrived home. He did not have a physician but when his brothers, sisters and cousins developed diphtheria and one died then a doctor was called and after some delay made a diagnosis.

In another country community a physician had called cases of diphtheria croup, and had not administered any anti-toxin, and would have continued his treatment if another doctor from a neighboring town had not been called and found typical membrane and received positive reports from the laboratory. By this time it had spread until half the families in this school district had some one sick with diphtheria.

None of these cases was difficult to diagnose. When the State furnishes free laboratory facilities and sends out sterile swab outfits there is no excuse not to make use of these facilities and know what one is treating. Besides the State furnishes free anti-toxin so that there is no excuse not to have these cases treated properly.

Do not get the impression that it is the country practitioner that is entirely at fault. Indeed at the same time, the writer knew of five different cases of tuberculosis that had been diagnosed by doctors in the country and these diagnoses had been turned down by different surgeons in different cities. The result was that the attempts of these conscientious physicians to stop the spread of this infection came to naught. Laboratory findings and subsequent course proved that the country doctors were correct. Nor does the writer think that the Wisconsin physicians are any more lax than those in other states.

My two years in health work have proved to me that we have an immense work before us in cleaning up the regular medical profession before we are ready to criticize the irregular practitioner and laity for their ignorance of health matters. If the regular medical men will not work as a unit in these matters, have we any right to find fault with those who have not had the scientific training that we have?

FRED JOHNSON.

## CIRCULAR LETTER TO CHIEF SURGEONS OF RAILROADS.

February 18, 1916.

The answer to the five questions from chief surgeons and their associates has shown a great diversity of opinion both as to first aid and as to the first treatment of the wound by the surgeon.

It has occurred to me that it would be a very good plan for each railroad chief surgeon to correspond with all of his associates to get their views on first aid and their methods of treating accident cases. Apparently there is now great interest in these two questions, and the relation between the chief surgeon and his associates should make a survey of this kind comparatively simple.

Later, there could be a comparison made of the different surveys.

In addition, each chief surgeon, if he has not already done so, should establish some uniform method of records which would allow a thorough study of the results and especially the period of disability.

Having established the results from the methods employed and having these uniform records, it will be possible to change methods and ascertain if improvement is possible. There is no doubt that the economic part of the problem is the period of disability, and that we

must have scientific bookkeeping if we wish to check the results and make progress towards economy and efficiency.

The information which I have at hand also demonstrates that not only the higher officials of the railroad company, but the men themselves do not understand the importance of instruction on first aid, of available first aid material, and of a well-organized and competent medical and surgical department. The chief surgeons and their associates will have to study methods of bringing this important question in its proper light both before the higher officers and the employees.

The propaganda of "Safety First" is far ahead of that of first aid. Scientific bookkeeping and records are constantly being improved in all the departments of great railroads, except the medical and surgical. (There are undoubtedly some exceptions.)

One large electric railroad company retrenched at the beginning of the war and used all means to retain the services of their experienced motormen and conductors. At the end of one year they were astonished at the reduction in the number of accidents, demonstrating at once the safety of experienced and well-trained employees. Their bookkeeping should have demonstrated this years before.

If you have written pamphlets on first aid, please mail copies to other chief surgeons of railroads and to the members of the Board of First Aid Standardization, and to me. This will allow an immediate exchange of views. As soon as your survey is finished, write it up for publication in your State medical journal.

JOSEPH C. BLOODGOOD,

Secretary.

### INFECTION IN TUBERCULOSIS.

"My personal feeling is that localized tuberculosis in early life probably has little influence on the disease as it presents itself in adults. This judgment is based on what is my personal interpretation of the experience with bovine vaccination. There the immunity as an influential factor seems not to persist much longer than do living bacilli introduced as a preventive.

"I should be inclined to interpret the facts of the human disease after this fashion. There is a high incidence of infection in early childhood very possibly owing to an especial permeability of the intestinal mucous membranes in that period. By the adolescent period as I conceive it most of the infected children are either cured of the disease or have died of it. Following the twentieth year a fresh period of high incidence occurs, probably owing in part to the failing natural immunity of the lungs and in part to increased exposure. This explanation takes account in some measure of the fact that almost the only cause of death which is important between the twelfth and sixteenth year is tuberculosis, together with the fact that there is little clinical tuberculosis at these ages. There might, of course, be other interpretations put on these facts, but I am only expressing my feeling in regard to the matter.

"In regard to artificial immunization it is my firm conviction in the light of past experience that the at-

tempt to immunize by the introduction of living tubercle bacilli, however they may seem to be attenuated or modified at the time when they are injected, is entirely inadvisable at present and is not apt to seem more desirable in the future. An artificial immunization with dead cultures I still conceive of as a possibility at some time in the future. All attempts in this direction which I am familiar with have failed to increase the resistance, and in other instances the resistance has actually been diminished, giving rise to a condition of hypersusceptibility. None the less I feel that it may become possible at some future time, with continued study of the matter, to develop methods which will separate from the whole micro-organisms certain constituents which may be immunizing in their activity."-Dr. Paul A. Lewis, "Journal of Outdoor Life," February, 1916.

### POISONOUS FLY PAPERS.

A year ago, in discussing this subject editorially, we gave a partial report of the cases of arsenical poisoning of children from accidentally consuming the contents of fly destroying contrivances during the summer of 1914. It was gratifying to note the number of medical journals that reprinted our editorial or commented upon the subject. The discussion was evidently a timely one.

For the summer of 1915 we have been able to secure the reports of the following cases:

			Recovery	Recovery
Month	No.	Fatal	Indicated	Doubtfu
May	1	1		
June	2			2
July	5	2	2	1
August	14	5	8	1
	*******	_		
Totals	22	8	10	4

These cases were reported by the daily press as occurring in the following states: Georgia, 1; Illinois, 6; Indiana, 2; Iowa, 2; Massachusetts, 2; Michigan, 2; Missouri, 1; Nebraska, 1; New York, 1; Oklahoma, 1; Ohio, 1; Pennsylvania, 2; a total of twenty-two cases. This report must necessarily be considered as very incomplete and but an indication of the possible extent of a wholly preventable danger.

We again point out the fact that the symptoms of arsenical poisoning are very similar to those of cholera infantum and that undoubtedly a number of the cases of cholera infantum that occurred were really cases of arsenical poisoning, and death if occurring, was attributed to the fact. The cases reported were of children ranging in age from 1 to 6 years. These little patients are not old enough to tell what they have taken when questioned as to their illness and unless they are seen consuming the fly poison the actual cause of their sickness or death is overlooked and the fatality ascribed to cholera infantum or to some other similar causes and the error in diagnosis goes undetected.

We repeat, arsenical fly destroying devices are dangerous and should be abolished. Health officials should become aroused to prevent further loss of life from their source. Our Michigan Legislature, this last session, passed a law regulating the sale of poisonous fly papers. Similar enactments should be secured and enforced in every state of the Union.—Journal of the Michigan State Medical Society.

## IT PAYS THE MANUFACTURER TO MAINTAIN ETHICAL STANDARDS.

The notice of the removal of the Dextri-Maltose manufacturing plant from Jersey City to Evansville, Ind., published in one of our advertising pages, deserves more than passing attention. It furnishes evidence of the natural growth of a manufacturing enterprise which is now vacating its old factory with 18,000 square feet of floor space for a new location in the Central West and in a new plant with 300,000 square feet of floor space—sixteen times larger than the old one.

This removal from a comparatively small to a very large housing also affords striking proof that success awaits the manufacturer who produces something the physician really wants, and markets his products in accordance with the standards set up by doctors for the sale of products they use. The first commandment for the direction of the manufacturer under these standards is: "Thou shalt not offer to both physician and public, by advertising or otherwise, anything which requires medical skill to properly use."

This commandment has been ignored by some manufacturers of infant foods, who have persistently educated the public with pscudopcdiatrics, thereby tending to increase infant mortality and hampering the physision in the practice of scientific, or even rational infant feeding.

But ultimate reform in the manufacture and sale of infant foods was as inevitable as the reform that has taken place in the sale of pharmaceutical products. The day of mystery and tradition in infant feeding is passing rapidly.

The recent simplification of bottle feeding, rendering it possible, without impractical complication, for the family physician to successfully adapt the diet to the individual baby, has brought about a strong conviction that the direction of infant feeding is distinctly the proper work of the physician.

This conviction has in turn created a demand for forms of carbohydrate foods which can be freshly prepared in exact proportions to meet clinical indications; and for their sale without directions for use, so that the physician can personally control the administration of the food.

The firm, which announces herewith its removal from the east to larger opportunities in the west, early recognized the requirement by the medical profession for a product used in infant feeding, made and sold exclusively for physicians, with no appeal, nor information to the public.

This firm deserves no special commendation for the course it has pursued, it being its duty to follow it. Reference to the sales of Dextri-Maltose is made simply to show that it is remunerative for manufacturers to treat the medical profession fairly.

#### THE MICROSCOPE.

Great things have small beginnings. A spectacle maker, Jan Leippersheim by name, living in Holland, invented a crude magnifying glass in 1608. Anton von Leuwenhoek, born in Delft, October 24, 1632, improved this clumsy toy and evolved a compound microscope which has become the most valuable sanitary tool yet devised by man. That first miscroscope was as far removed from the high-powered instrument of today as is the modern American from the original caveman. Yet by this faulty means, Leuwenhoek, naturalist, physician and botanist, discovered certain minute bodies which he called "little animals". He made drawings of these and today we know them for those useful friends and malignant enemies of man—bacteria.

We spend our days surrounded by another world, a living world of countless billions, invisible to the naked eye, silent, tireless, destroying the living, consuming the dead, useful in the sciences and arts, yet often followed by a train of sickness, suffering and death. A curious paradox this, yet bacteria are at once the greatest friends and the fiercest focs of every living thing. Not animals, as Leuwenhoek thought, but vegetables, bacteria consists of two classes, those which prey on living things and those which reduce to their original minerals, fluids and gases, every dead thing which they attack. They are of various shapes, round like marbles or straight like little sticks. They grow in clusters, chains, and in pairs. They are ubiquitous. The dusty air, the earth and its waters, the interior of animals and plants all contain them. They cause the fermentation of foods, they make cheese, they produce disease and some of them when killed and injected into an animal protect it against the very disease which they would have produced if living. Many of them live as harmless creatures in the body of an animal for years, only to kill their host when the opportunity presents. Their study has given birth to a science, bacteriology, one of the foundation stones of public health.

Their mere presence does not necessarily produce disease. Recalling the parable of the sower, some bacteria fall by the wayside, some fall upon stony places, and some fall in good ground and bring forth the fruit of suffering, perhaps of death. A normal, temperate life, free alike from the gluttony of idleness or overwork, the sound mind in the sound body, a cheerful, normal environment, these form the stony places in which bacteria take no root. The depraved appetites of mind and body, the dark and sordid atmosphere of penury, the nerve racking and strength undermining trades, these prepare the good ground.

The great weapon against bacteria is cleanliness. The mastery over premature death lies to a great measure in our own hands. Clean persons, clean cities, clean workshops and clean lies are the makers of public health. The United States Public Health Service and other sanitary bodies of this country are gradually bringing these facts home to the general public. In this way cleanliness is becoming more general, and the span of life in America is gradually being lengthened. All of which is largely due to the microscope.

U. S. P. H. SEBVICE.

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NEXT ANNUAL SESSION, MADISON, OCTOBER, 1916. The Wisconsin Medical Journal, Official Publication

## LIST OF EXECUTIVE OFFICERS OF COUNTY MEDICAL SOCIETIES.

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Winnebago Wood		
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## SOCIETY PROCEEDINGS

## MEETING OF THE COUNCIL.

Milwaukee, Feb. 10, 1916.

The meeting was called to order by Chairman Edward Evans at 11 A. M., February 10th, 1916, in the rooms of the Milwaukee Medical Society.

The following were present: Councilors Wilkinson, Redelings, Dodd, Evans, Hay, Abraham, Cairns, Windesheim, Nye, Dearholt and Zierath, President Jermain, Secretary Sleyster, Treasurer Hall, Editor Warfield and Drs. Patek, Seaman and Beffel.

The reports of the secretary and treasurer were read and approved. These showed the society to be larger and stronger than ever before.

Drs. Windesheim, Dodd and Abraham reported as delegates to the various A. M. A. Councils held in Chicago this week.

The secretary was instructed to carry out his recommendations for a meeting of the Council and County Secretaries preceding the next annual meeting—the program to be carried out as suggested in his report.

Following a discussion as to the ethics of regular physicians consulting with irregulars, the matter was referred to the secretary, who was instructed to take the matter up with the A. M. A. and report at the next meeting.

By unanimous ballot the following officers were reelected: Chairman, Edward Evans; secretary, Rock Sleyster; treasurer, S. S. Hall. The secretary's salary was fixed at six hundred dollars.

Following the meeting the Committee on Health and Public Instruction met and laid out a plan of work for 1916.

ROCK SLEYSTER, Secretary.

## REPORT OF THE SECRETARY TO THE COUNCIL FOR THE YEAR 1915.

Milwaukee, Feb. 10th, 1916.

To the Council.

State Medical Society of Wisconsin:

In compliance with the requirements of our constitution I have the honor of submitting to you my annual report for the year ending Dec. 31st, 1915. At this time I wish to express my appreciation of the privilege it has been to serve our society again in this capacity and to thank each member of this body and the other interested workers of our organization for the splendid co-operation they have at all times given me in my work. The growth and progress of our organization has been steady and rapid the past five years and last year we stood as the best organized state in the union. Substantial gains in membership have been repeatedly made in most of our counties and today but few physicians in Wisconsin who are eligible

and desirable for membership remain outside of the society. Thus one of the big problems that has confronted us has been met—the problem of organization. We have the men—now what arc we to do with and for them? No other state has so well met and solved this first problem of medical organization-completing its membership-and no other state society is, therefore, in a better position today to accomplish the real aims for which it is intended. An organization which has grown until it now embraces practically all of the reputable physicians of a great state should accomplish for the public and for its members a progressive program of betterment. We must not be content to hold our meetings, to publish our Journal and to defend our members when they are in trouble. This is a subject demanding the most thoughtful consideration of this body.

The State Medical Society was planned for service—service to the public and service to its members. The past few years have been fruitful of results. Through the efforts of organized medicine the standards of medical education have been raised. Much has been accomplished in preventive medicine and public instruction. A relentless war on patent and proprietary medicines has nearly made them a thing of the past. The profession, once a discordant and scattered band of workers, have been brought together and taught that more can be accomplished in a side by side effort. The work is but started. The greatest problems are to be solved. The workmen are together, but some one must plan and lay out the work. Some one must take the initiative and, I believe, this responsibility most properly rests on you members of this body. What can you members of the Council plan for an increase in service of the State Society to its members and to the public?

I have given this subject some thought and study and I wish to incorporate as part of my annual report a recommendation that between now and the annual meeting a thorough investigation of this subject be made. To carry this out I would offer as a suggestion the following plan: That this body resolve itself into twelve committees of one member cach. (I say one member each, for experience has taught us that one member does the work.) I would suggest that each committee of one member take one of the following suggested subjects, which can be assigned by the chairman (the subjects can, of course, be changed). and that such committee of one make a thorough study

## MEMBERSHIP REPORT.

December 31, 1915.

		1914	1915 Oct. 1st	Loss— Gain+		Deaths r	Re- novals	Re- signed	New Members
1s	t District—								
	Dodge		37	1	0	0	0	0	0
	Jefferson		32	-2	0	2	2	0	3
	Washington		16	+2	0	2	1	0	3
	Waukesha	40	46	+6	0	0	1	0	8
	Total	124	131	+7	0	4	4	0	14
2n	d District—								
	Kenoslia	36	33	-3	4	0	0	0	1
	Racine	39	40	+1	1	0	2	0	3
	Walworth	26	29	+3	0	0	0	0	2
	Total	101	102	+1		. 0	2	0	6
3rc	l District—								
	Dane	106	100	6	5	2	5	. 3	3
	Columbia	30	30	0	0	0	0	0	1
	Green	19	19	0	0	G	0	0	0
	Rock	60	56	-4	4	1	0	0	2
	Sauk	22	21	1	1	0	1	0	1
	Total	237	226	<u>—</u> —11	10	3	6	3	7
4t1	District—								
	Crawford	11	10	—1	1	0	1	0	1
	Grant	46	45	—1 —1	2	0	2	0	4
	Iowa	12	13	+1	0	0	0	0	3
	La Fayette	18	18	0	0	0	0	0	0
	Richland	13	13	0	0	0	0	0	0
	Total	100	99	<u>—1</u>	3		3		8
5th	District—								
Oth	Ozaukee	0	7	1 7	0	0	0	0	0
	Calumet	15	7 14	+7 —1	0	0	0	$0 \\ 2$	0
	Manitowoc	24	26	+2	0	0	0	0	2
	Sheboygan	47	46	—1	2	0	0	0	1
	-								
	Total	86	93	+6	2	0	0	2	4
6th	District—								
	Brown-Kewaunee	39	42	+3	1	0	1	0	5
	Door	11	10	l	1	1	0	0	1
	Outagamie	36	35	<u>—1</u>	0	0	0	0	0
	Fond du Lac	51	55	+4	0	1	0	0	5
	Winnebago	64	72	+8		3			9
-43	Total	201	214	+13	2	5	1	0	20
/ th	District—								
	Juneau	12	12	0	0	0	0	0	0
	La Crosse	36	38	+2	0	0	0	1	4
	Monroe	19	19	0	0	1	0	0	1
	Trempeleau-Jackson-Buffalo	25	27	+2	0	0	2	0	4
	Vernon	11	14	+3	0	1	0	0	
	Total	103	110	+7	0	2	2	1	13

8th District—	1914	1915 Oct. 1st	Loss— Gain+	Delin- quent	Deaths m	Re- iovals s	Re- signed M	New Iembers
Marinette-Florence	0=	0.0	,	,	1	0	,	1
Oeonto		$\frac{26}{7}$	· —1 0	$\frac{1}{0}$	$\frac{1}{0}$	0	$\frac{1}{0}$	1 0
Shawano		22	+2	0	0	2	0	4
Total	54	55	+1	1	1	2	1	5
9th District—								
Clark	18	17	1	0	1	0	0	0
Green Lake—Waushara-Adams	29	25	-4	3	1	1	1	3
Lineoln		12	+1	0	0	0	0	1
Marathon		36	<u>1</u>	1	2	0	1	2
Portage		21	1	1	0	0	0	0
Waupaea	25	27	+2	0	0	0	0	2
Wood	21	24	+3	0	0	0	0	3
Total	164	163	—l	5	4	1	2	11
10th District—								
Barron-PWSBurnett	32	99	1.1	9	0	0	,	4
Chippewa		$\frac{33}{21}$	+1 —1	$\frac{2}{2}$	0	0	1 1	0
Dunn-Pepin		18	<del>-1</del> +1	1	0	0	0	2
Eau Claire		39	+2	0	1	1	0	4
Pierce		12	—2	2	0	0	0	0
Rusk		10	+2	0	0	0	0	2
St. Croix		18	0	0	0	1	0	1
Total	148	151	+3	7	1		2	13
11th District—								
Ashland-Bayfield-Iron	22	27	+5	1	0	0	0	1
Douglas		36	+1	3	0	1	0	5
Langlade		14	+1	0	0	1	0	2
Oneida-Forest-Vilas		11	-1	3	0	0	0	2
Priee-Taylor		13	+3	0	0	0	0	3
Total	92	101	+9	7	0	2	0	13
12th District—								
Milwaukee	333	338	+5	11	8	4	1	19
Totals	1743	1789	+46	53	28	50	12	133
Summary—								
Total 1914 membership	R						· · · · · .	. 1789
Deaths	N	ew mem	bers					. 133

of this subject and bring in a written report on it with a well defined and planned way of carrying it out if it is found feasible. I would suggest that the council meet this year with the  $\Lambda$ ssociation of County Secretaries and State Officers a day in advance of the general meeting and that the Council make these reports the program for this most representative meeting of the organization workers of the state society. If you approve of this plan I want to urge upon each councilor a sense of

your duty and responsibility to begin work at once and not stop until you have exhausted every source of information on your subject. If this plan is adopted and conscientiously carried out by each Councilor, I will venture to predict that this meeting will be productive of more good for our society than any meeting we have ever held.

I would suggest the following subjects for study. These may, of course, be changed as better suggestions are offered after hearing them: Scientific Work.

- 1—A plan for a series of clinics to be held in various parts of the state under the auspices of the State and County Societies.
- 2—A plan for demonstrations of the newer laboratory work before the County Societies.
- 3—Suggested outlines of a year's scientific work for County Societies holding 4, 6 and 12 meetings.
- 4—Plan for a speaker's bureau of Wisconsin's full time medical teachers available for County Society programs, giving names and subjects.

## Material Welfare of Members.

- 5—What can be done to secure equitable fees and their standardization.
- 6—Mutual or other investments for the physician's savings.
- 7—Co-operative purchasing through the medium of the state society—barter and exchange.
- 8—Would a mutual accident and health insurance plan be feasible?
- 9—Would an old age and disability pension or an endowed home for aged and needy physicians be possible?
- 10—A plan for a mutual credit and collection bureau.
- 11—Ways and means of increasing the income of the state society or of establishing funds.
- 12—What more can we do to protect the public and profession against the encroachment of fads, cults and irregulars?

## Membership.

Included in this report is a detailed statement of the membership of the State Medical Society of Wisconsin for the year 1915. This is so tabulated as to show for each county and councilor district the following information: 1914 membership, 1915 membership, loss or gain, number of delinquents, new members, deaths, removals and resignations.

Our total membership on Dec. 31st, 1914, was 1,743. The close of 1915 found us with a membership of 1,789, a gain of 46 and the largest

number by 46 that the society has ever had. Thirty new names were sent in by the various county societies at the last of the year for membership to begin on January 1st, so our membership today is well over the 1,800 mark. The attached tables tell of a uniform healthy growth throughout the state and I will not take your time detailing them. Respectfully submitted,

ROCK SLEYSTER, Secretary.

## COUNTY SOCIETY MEETINGS

## BROWN-KEWAUNEE COUNTY

At the annual meeting of the Brown-Kewaunee Medical Society held at Green Bay on January 27, 1916, the following officers were elected: President, Dr. J. P. Lenfesty, DePere; vice-president, Dr. I. E. Levitas, Green Bay; secretary-treasurer, Dr. H. C. Mix, Green Bay; delegate, Dr. R. H. Carter, Green Bay; alternate, Dr. F. H. Wochos, Green Bay.

H. C. MIX, M. D., Secretary-Treasurer.

## DANE COUNTY

The annual meeting of the Dane County Medical Society was held December 15, 1915: The following officers were elected for the ensuing year: President, Dr. C. S. Sheldon, Madison; vice-president, Dr. F. S. Meade, Madison; secretary-treasurer, Dr. L. H. Prince, Madison; censors, Drs. L. R. Head, H. A. Gilbert, and C. A. Harper, Madison; delegates, Drs. L. R. Head and H. A. Gilbert, Madison; alternates, Drs. K. W. Smith and H. E. Purcell, Madison. Aside from the election of officers the meeting was of a social nature, a banquet being held at the Madison Club. There were present 102 members in good standing.

L. H. PRINCE, M. D., Secretary.

## FOX RIVER VALLEY MEDICAL SOCIETY.

The twenty-eighth annual meeting of the Fox River Valley Medical Society was held at Green Bay on February 19, 1916. Headquarters were located at the Elks' Club, and the banquet was held at the Beaumont Hotel. Clinics were held at the local hospitals in the morning. The program for the afternoon session was as follows: Presentation of a Case of Hodgkin's Disease, Dr. R. L. Cowles, Green Bay; Roentgen Ray Diagnosis with Special Reference to Tuberculosis, Dr. E. E. Axtell, Menomonie, Mich. Annual Address in Medicine. The Diagnosis and Treatment of Gastric Ulcer in the Light of Modern Clinical Investigation, Stercopticon Views, Dr. Frank Smithies, Chicago. Duodenal Ulcer in Infancy. Report of four cases, Dr. W. H. Bartran, Green Bay. Annual Address in Surgery. The Surgical Management of Pernicious Anemia. Report of cases and stereopticon views. Dr. Nelson M. Percy, Chicago.

## JUNEAU COUNTY

The thirteenth annual meeting of the Juneau County Medical Society was held at Camp Douglas, December 7, 1915. Meeting called to order at 11 A. M. by the president, Dr. C. C. Vogel. Minutes of the last meeting were approved as read. The president made a few remarks, bearing upon the various duties and qualifications of a president of a county medical society, and promising in the future to be better prepared. Dr. F. T. Field then presented a most thoroughly prepared paper on Nature's Therapeutics. At one o'clock the meeting adjourned for luncheon, which was served at the Brick Hotel. Meeting called to order at 2 P. M., the president presiding. Dr. F. S. Lawler presented a very concise paper on Puerperal Eclampsia. A general discussion followed the reading of each paper. On motion the Society decided to hold an open meeting at Mauston some time during the summer.

The following officers were elected for the coming year: President, Dr. C. C. Vogel, Elroy; vice-president, Dr. Brand Starnes, Mauston; secretary-treasurer, A. T. Gregory, Elroy; delegate, E. H. Townsend, New Lisbon; alternate, Dr. C. O. Cron, Camp Douglas; censor, Dr. T. S. Lawler, Lyndon Station.

On motion the Society adjourned.

A. T. GREGORY, M. D., Secretary.

#### LA CROSSE COUNTY

A banquet and illustrated lecture featured the monthly meeting of the La Crosse County Medical Society, held on February 18, 1916, at the Elks' Hall. Twenty-eight members were present. Following the feast Dr. B. F. Lounsbury of Chicago, assistant chief surgeon, St. Paul Railway, gave an illustrated lecture on Fractures of Bones of the Feet. Secretary J. M. Furstman announces that the Society will endeavor to have a special lecture or feature at each monthly meeting.

## LANGLADE COUNTY

The annual meeting of the Langlade County Medical Society was held on February 8th, 1916, at the Butterfield Hotel. Nearly every physician in the county was present. A seven course dinner was served, following which the election of officers was held, with the following result: President, Dr. Fred V. Watson, Antigo; vice-president, Dr. H. G. Westphal, Polar; secretary-treasurer, Dr. J. C. Wright, Antigo; delegate, Dr. W. N. Moore, Antigo; alternate, Dr. Lyman Steffen. Every physician in Langlade county is a member of the County Society.

## MANITOWOC COUNTY

At the February meeting of the Manitowoc County Medical Society the following officers were elected: President, Dr. A. M. Farrell. Two Rivers; vice-president, Dr. Louis Falge, Manitowoc; secretary-treasurer, Dr. W. E. Donahuc, Manitowoc; delegate, Dr. W. G. Kemper, Manitowoc; alternate, Dr. A. J. Shimek, Manitowoc; censors, Drs. Louis Falge, F. W. Hammond, and J. E. Meany, Manitowoc,

## MILWAUKEE COUNTY.

Milwaukee County Medical Society met at the Hotel Wisconsin on February 9, 1916. Sewage Disposal and how it affects the city, was discussed by T. C. Hatton. The Relation of Bacteria to Sewage Purification was the subject of a talk by Dr. W. R. Copeland. Dr. D. J. Hayes spoke on The Treatment of Prostatic Hypertrophy.

A vote of thanks was tendered Mr. Hatton and Dr. Copeland for their interesting and instructive addresses.

Motion was made by Dr. L. Nolte, duly seconded and earried, that a Committee be appointed to draw up Resolutions requesting the City Council to aid in furthering the completion of this project for Sewage Disposal. Committee appointed consisted of Drs. J. Beffel, L. Nolte, and L. F. Jermain. There were 110 present.

#### NINTH COUNCILOR DISTRICT.

The mid-winter meeting of the Ninth Councilor District Medical Society was held at Marshfield, on February 2, 1916. Following dinner at the Hotel Blodgett, the physicians assembled at the city hall, where the feature of the program was a symposium on Fractures, which included an excellent address by Dr. C. W. Hopkins, chief surgeon for the Chicago and North-Western Railway.

#### OTO-OPHTHALMIC SOCIETY.

At the annual meeting of the Milwaukee Oto-Ophthalmic Society, held January 19, 1916, at the University Club, the following officers were elected: President, Dr. G. I. Hogue; vice-president, Dr. J. S. Barnes; secretary-treasurer, Dr. C. S. Beebe.

## PRELIMINARY MEETING FOR TRUDEAU SOCIETY.

Wisconsin physicians interested in tuberculosis work met at Muirdale sanatorium recently and organized the Edward L. Trudeau Society for the Study of Tuberculosis. Only a preliminary organization was effected and March 15 members will meet at the Milwaukee University club to adopt a constitution and elect officers. Dr. G. L. Bellis was elected chairman and Dr. Thomas Willett secretary of the Friday night meeting.

Every physician in the state interested in the cure and prevention of tuberculosis will be invited to join the organization.

## OUTAGAMIE-FOND DU LAC-WINNEBAGO-BROWN-CALUMET COUNTY

A joint meeting of Outagamie-Fond du Lac-Brown-Winnebago and Calumet County Societies was held at Appleton, on February 2nd, 1916. Dr. Allan B. Kanavel of Chicago spoke on the "Diagnosis and Treatment of Brain and Cord Tumors," illustrated by lantern slides.

The meeting was held at the Hotel Sherman, Appleton. Sixty-five members were present. A splendid meeting.

#### SHEBOYGAN COUNTY

Sheboygan County Medical Society, at its annual meeting held on January 28, 1916, elected the following officers for the ensuing year: President, Dr. Otto B. Bock, Sheboygan; vice president, Dr. J. C. Elfers, Sheboygan; secretary-treasurer, Dr. Arthur Knauf, Sheboygan. A committee was appointed to rearrange the fee bill and the committee will report at the next meeting of the Society.

### WAUKESHA COUNTY

Waukesha County Medical Society met on February 2, at the Hotel Majestic. A banquet was served at which the Oconomowoc members were hosts. Dr. Peter Bassoe, Chicago, addressed the Society.

## NATIONAL CONFERENCE OF CHARITIES AND CORRECTION.

Health conditions will be linked with nearly every phase of the problems of charity and correction to be considered at the forty-third annual meeting of the National Conference of Charities and Correction at Indianapolis, Indiana, May 10 to 17. One section, that on health, will be devoted entirely to a discussion, by physicians, of the part the medical practitioner and surgeon may play in social work.

Dr. J. N. Hurty, sceretary of the Indiana State Board of Health, is chairman of the section on health and Dr. Theodore B. Sachs, of the Municipal Tuberculosis Sanitarium of Chicago is vice-chairman. In the general session devoted to subjects of wider popular interest Dr. Eugene L. Fisk, director of hygiene of the Life Extension Institute, New York, and Professor L. J. Rettger of the Indiana State Normal School will discuss longer and more effective living.

In the section meetings there will be a symposium on disease, ill health, and sickness, and their bearing upon crime, insanity, and poverty. The speakers will be Dr. David C. Peyton, superintendent of the Indiana Reformatory, and Dr. S. E. Smith, superintendent of the Eastern Hospital for the Insane, at Richmond, Indiana. Dr. E. R. Hayhurst, of the Ohio State Board of Health, will lead a diseassion of industrial hygienc. The relation of venereal diseases to public and individual health will be considered by Dr. C. S. Woods, superintenlent of the Methodist Hospital, Indianapolis, and Dr. William F. Snow, secretary of the American Social Hygiene Association. A number of dental surgeons will also participate by giving their views on the relation of oral hygiene to public and individual health.

Other sections allied in subject matter to that on health will take up the problem of inebricty and the relation of feeble-mindedness and insanity to social questions. The former division of the conference will make a distinct contribution by presenting the results of an inquiry among large employers as to the results attained from their prohibition of drinking among employes.

A broad field of community problems will be covered by six other sections of the conference. That on the family and the community will take up the co-ordination of eivic effort in small communities. In its general session it will consider conditions adverse to efficient public work under democratic government.

A section on unemployment will examine into the degree to which social workers are prepared for the next period of stress. Graham Romeyn Taylor, of *The Survey*, is in charge of a section on the promotion of social programs, in which representatives of labor, business men, editors, and public officials, will give their ideas on the relation of social workers' programs to the community in general.

The growing tendency to put relief work in the hands of public agencies will occupy much of the attention of a section on public and private charities. Problems connected with the organization and administration of charity work and the keeping of proper records will also be discussed.

The conference will be opened on the evening of May 10 with an address by the president, Father Francis H. Gavisk, in which the keynote of the entire gathering will be struck. A talk of exceptional public interest will also be given at this inaugural session by Ernest P. Bicknell, director of civilian relief of the American Red Cross. Mr. Bicknell will discuss war relief and his own experiences close to the firing lines in the various European war zones.

## NEWS ITEMS AND PERSONALS

Dr. Charles S. Sheldon, Madison, who has been ill with pneumonia, is back at work.

Dr. Theodore H. Burbach, Milwaukee, suffered a fractured shoulder in an automobile accident on February 21.

DR. CHARLES H. VILAS, Madison, has been named a member of the University Board of Visitors by the Board of Regents. He succeeds Dr. Ernest Copeland, Milwaukee, who recently resigned.

Dr. W. A. Joseph, Hancock, is defendant in a malpractice suit brought by Robert Mirgler of that village. The trouble arose, it is stated, over the treatment of a case of appendicitis.

The consulting staff for the Milwaukee Hospital for the Insane, for 1916, is announced by Dr. A. F. Young, superintendent, as follows: Drs. Otto Foerster, J. A. Bach, H. B. Hitz, Franz Pfister, A. H. Levings, W. C. F. Witte, D. J. Hayes, H. V. Ogden, L. F. Jermain, J. S. Cutler, W. T. Lochemes and Daniel Hopkinson.

Dr. W. F. Ford, Milwaukee, has been appointed as assistant chief of the tuberculosis division of the Milwaukee Health Department, at a salary of \$1,500 per year.

Dr. W. P. Smith, prison physician at Waupun, who recently was attacked by a convict, and sustained severe cuts and bruises of the face, is at St. Agnes Hospital, suffering from blood poisoning.

Dr. Emil S. Christensen, Two Rivers, who has been seriously ill with septicemia, has recovered.

Dr. G. C. Hoyer, Milwaukee, has been reelected medical director of the Aid Association for Lutherans.

Dr. G. N. Hidershide, Arcadia, is reported critically ill at Winona, Minn., after an operation for appendicitis.

Dr. Bartholomew Bantley, Milwaukee, has been appointed first assistant surgeon in the Battle Mountain Sanatorium, Hot Springs, S. D.

Dr. W. H. Bartran has been elected president of the Green Bay Branch of the Fox River Valley Efficiency League.

A hospital is being fitted up in Colfax, Wisconsin, by Dr. L. A. Larseu.

Grand Rapids, Wisconsin, plans erecting a hospital to cost about \$25,000. The city has \$10,000 on hand left by the Emily Witter estate for hospital purposes, and the intention is to raise the balance by subscription.

The new hospital built by Drs. F. S. Tuffley and E. H. Spiegelberg, at Boscobel, was opened to the public on February 22nd.

A new wing will be added to the Madison General Hospital, Madison, which will be used exclusively for obstetrical purposes. The new wing will cost about \$50,000.

Portage, Wisconsin, plans building a new hospital to cost about \$10,000.

The annual report of the Luther Hospital Association, Eau Claire, shows that during the year 1.176 patients were admitted to the hospital. The financial report shows a profit of nearly \$8,000, most of which was expended for improvements. There is at present \$5,000 in the building fund, and work on an addition to the hospital, to cost \$20,000, will be commenced in the spring.

Willow Brook, the new tuberculosis sanatorium

for Kenosha County, was opened to patients in February.

The Marathon County Board has decided to locate the tuberculosis sanatorium on the eastern part of the county farm, in the town of Stettin.

The formal dedicatory ceremonies of the new hospital erected by the Wisconsin Deaconess Association in Green Bay, were held Jan. 18 and 19.

The State Tuberculosis Sanatorium at Wales now has an official post office known as Statesan, Wis.

Walworth, Waukesha and Jefferson counties are discussing the advisability of jointly erecting a tuberculosis sanatorium.

The following changes in the Milwaukee Health Department were recently authorized by the finance committee of the common council: Dr. Geo. R. Ernst becomes general head of the tuberculosis department, and receives an assistant. The number of nurses at the new South View Hospital, when it is opened in the spring, is increased from eight to eleven, while one nurse is added to the dispensary department. For prevention work among children at Greenfield Sanatorium, \$6,480 is set aside for salaries.

Patients at Muirdale, Milwaukee county's tuberculosis Sanatorium, will be given work to keep them busy and happy. A workshop will be established in which patients will be given something to do from thirty minutes to one hour each day.

All attendants at the Milwaukee Hospital for the Insaue, as well as those in charge of the serving and preparation of food for inmates, have been required by Supt. A. F. Young to undergo a physical examination. Dr. Young says this is simply a precautionary measure to safeguard the health of the inmates.

The Milwaukee Common Council has appropriated \$10,000 to fight the spread of typhoid fever. The appropriation was asked for by Health Commissioner Ruhland, and will go toward vaccination of persons unable to pay for it, and for visiting nurse work.

At Manitowoc it is said bills for \$3,000 have been presented to the city for caring for small-pox patients during a recent epidemic. This is in addition to the cost of supplies for quarantined families, and is in contrast with the \$800 which it

cost the city for free vaccination after the epidemic started.

The Annual Clinical Session of The Wisconsin Surgical Association will be held in Milwaukee on May 10th and 11th, 1916. The Arrangement and Program Committees promise the presentation of interesting and instructive Clinics and Discussions. The Headquarters of the meeting will be held at the Hotel Wisconsin. Invitation is extended to all interested in the progress of Surgery in Wisconsin.

A preliminary program of the Session will be published in the next issue of the Journal.

An exhibit of X-ray plates will be held May 10th and 11th under the auspices of the Wisconsin Surgical Association. All Wisconsin Roentgenologists are cordially invited to loan interesting plates for the exhibit. In order that sufficient illumination space may be provided, please notify us as soon as possible how much space you will require.

79 Wisconsin Street.

The First Aid Committee for Wisconsin is as follows:

Dr. D. J. Hayes, Matthews Bldg., Milwaukee.
Dr. C. H. Lemon, 304 Public Service Bldg., Milwaukee.

Dr. T. L. Harrington, Caswell Blk., Milwaukce. Dr. J. M. Dodd, Ashland.

Dr. Wilson Cunningham, Platteville.

Secretary State Medical Society—Dr. Rock Sleyster, Waupun.

Editor State Medical Journal—Dr. L. M. Warfield, Milwaukec.

Health Commissioner Ruhland, Milwaukee, is making plans to have measles and whooping cough made subjects of special discussion at the next annual convention of the American Association for the Study and Prevention of Infant Mortality, which will be held in Milwaukee, Oct. 19-21, 1916.

Whooping cough attacked 2,318 persons in Wisconsin last year. This the record shows is a marked increase over other years. The mortality in 1915 was 107, 24 of these were in Milwaukee. In 1914, when there were 1,121 cases, deaths were 85. In 1913 there were 211 deaths, and in the preceding year 232.

The Racine Board of Health plans establishing a baby encampment during the months of July and August, in the suburban sections of the city, where babies will be treated and cared for free of charge.

The number of deaths reported from intestinal diseases in Milwaukee in January, 1916, is double that of January, 1915. January, 1916, had 24, while the previous year had 12. Of the 24 who died in January, 1916, 17 were children under 2, and all but one of the 12 who died in January, 1915, were under that age.

Pneumonia led all diseases in Wisconsin mortality throughout the year, showing a large excess over tuberculosis and cancer, its next rivals in destructiveness. Pneumonia caused 3,057 deaths, tuberculosis 2,286, and cancer 1,798.

Federal regulation of the medical profession and a national statute making sickness insurance for the 32,000,000 wage earners and their families compulsory were strongly urged by Dr. Otto V. Huffman, secretary Long Island College Hospital, in an address before the Federation of State Medical Boards at the Congress Hotel, Chicago, recently.

The American Orthopedic Association announces the appointment of Dr. Mark H. Rogers, Boston, as editor of the American Journal of Orthopedic Surgery, the only periodical in the English language devoted to orthopedics. The journal, which has now completed 13 volumes as a quarterly publication, will henceforth be issued monthly, the first number in the new form being that of January, 1916. The office of the publication has been transferred from Philadelphia to Ernest Gregory, 126 Mass. Ave., Boston. The subscription price is \$4.00 per year.

The Chicago Medical Society announces the fifth annual meeting of Alienists and Neurologists of the United States, to be held under the auspices of the Chicago Medical Society, June 19 to 23, 1916, at the LaSalle Hotel.

We wish to invite you to attend these meetings, and to participate by paper or take part in the discussion of the various subjects and other matters that come before the conference. We hope to enlist your valuable assistance in a campaign of education of physicians and the public as to the causative forces of mental deficiency and will appreciate your assistance. As physicians and the public have taken great interest in these meetings, the Chicago Medical Society, even though at great

expense, has decided to continue these annually without expense to others.

Resolutions were passed at the meeting in 1915, requesting the governors of the various states to appoint committees to investigate the causative forces of feeble-mindedness. Reports of these committees will be made at the meeting in 1916. The reports of the general committee will be forwarded to the governors of each state. Resolutions will be formulated by the conference that will be instructive to legislatures, to the end that reasonable laws may be passed, that will in a measure at least be preventive of mental deficiency.

The governors and boards of administration or control are taking great interest in these mcctings and giving us valuable assistance to carry forward this movement. We hope also to interest the editors of the various medical journals in this movement and through them enlist the help of physicians. If a campaign of education were made against the causative forces of mental defectiveness as there is against tuberculosis, a wonderful amount of good would result. This subject should interest us, first, from a humanitarian standpoint, second, from an economic standpoint. The judges of our courts are acquainting themselves with mental diseases; they give us the information that a large per cent of crime is committed by mental defectives, and a large percentage of the prisoners in our penal institutions are also defectives, and should not have been confined to prisons of this kind, but sent to farm colonies or other reformatory institutions with proper environment. our state asylums, there are many cases of insanity which, if they had been diagnosed early, could have been cured. This is especially the case as regards dementia praecox and lues. The state would not have been burdened with the immense expense of their long confinement, and their families would have been relieved of the humiliation of their commitment.

There has been no branch of medicine so neglected as the study of mental diseases and psychology. There should be a great reform in this respect within the near future.

W. T. Mefford.

Secretary of Conference.

WM. O. KROHN, Chairman,

29 East Madison St., Chicago.

## THE AMERICAN MEDICAL GOLFING ASSOCIATION.

In accordance with preliminary announcement made in the A. M. A. Journal previous to the last A. M. A. convention, the American Medical Golfing Association held its first tournament in San Francisco, June 21, 1915. Arrangements were then made for the organization and that is now complete with the following directors:

President—Wendell C. Phillips, New York. Vice-President—James Eaves, San Francisco.

Secretary-Treasurer-Will Walter, Chicago.

Plans are now being made for the second tournament, to be held in Detroit at the forthcoming A. M. A. convention in June.

The directors have decided to list as charter members all fellows who shall have enrolled by April 1, 1916.

All fellows of the A. M. A. who play the game are eligible and may obtain the desired information from the Secretary-Treasurer, Dr. Will Walter, 122 S. Michigan Boulevard, Chicago.

Members of the British Medical Association have a similar organization for play at their annual meetings, and it is thought that this will add materially to the social interest of the A. M. A., as it has to the B. M. A. conventions.

## REMOVALS

Dr. Joseph Mountain has located at Hartford for the practice of his profession.

Dr. W. J. Winnemann has removed from South Milwaukee to Milwaukee.

### MARRIAGES

Dr. Eugene Radford Boycr. Hersey, Wisconsin, and Miss Florence Marie Carlson, Woodville, Wisconsin, recently.

Dr. Harry P. Bowen, Johnson Creek, and Miss Florence F. Imig, Waukesha, at Milwaukee, January 4, 1916.

## OBITUARIES.

Dr. Edward A. Bass, Montello, died at Madison, on February 11, 1916.

Dr. Henry B. Favill, Chicago, died of pneumonia at Springfield, Massachusetts, on February

20, 1916. Henry Baird Favill was born at Madison, Wisconsin, in 1860, and graduated from the University of Wisconsin in 1880. Graduated from Rush Medical College in 1883. He first practiced at Madison, and in 1893 removed to Chicago.

Dr. H. A. Albers, Milwaukee, died on January 31, after a brief illness, aged 60 years. Dr. Albers was born May 13, 1856, in the town of New Holstein. After completing the district school course, he attended the high school at Chilton, making his home with the late Dr. David LaCount. He later attended Lawrence University at Appleton, and graduated from that institution in 1878. He then took up the study of medicine at Chicago, graduating from Rush Medical College in 1881, and immediately thereafter located at Thiensville, where he practiced his profession for thirty-three years. Two years ago he retired from active practice because of ill health. He was one of the founders of the Wisconsin College of Physicians and Surgeons, and professor of medicine there for many years.

Dr. Hugo Philler, Minneapolis, for many years one of the leading physicians of Waukesha county, died on February 22, 1916, aged 78 years. Dr. Philler was born in the province of Silesia, Prussia, Germany, on January 4, 1838, and came to America in August, 1861. He received his education in the schools and universities in Germany, studying medicine at the University of Breslau, and afterward at the University of Greifswald, from which he graduated in 1861. He was first assistant surgeon of the Forty-fifth New York infantry, and served in that capacity until the close of the Civil War. In 1865 Dr. Philler located at Waukesha, and had lived there until about eight years ago, when he removed to Minneapolis.

Dr. James A. Masterson, Watertown, died on February 8, 1916, aged 71 years. Dr. Masterson was born in Watertown in 1845, and had spent his entire life in that city. He received his education in St. Bernard's parochial school, the public schools of Watertown, Northwestern College, and the Iowa State University. He studied medicine with the late Dr. James Cody, and then entered Rush, graduating in 1871.

He was a member of Jefferson County and the State Medical Societics.

## **BOOK REVIEWS**

OXFORD WAR PRIMERS OF MEDICINE AND SURGERY.

WOUNDS IN WAR: THEIR TREATMENT AND RESULTS. D'Arcy Power, M. B. (Oxon.), F. R. C. S. (Eng.), Lieutenant-Colonel R. A. M. C. (T.), 2s. 6d, net.

SURGERY OF THE HEAD. L. Bathe Rawling, M. B., B. C. (Cantab.), F. R. C. S. (Eng.), Major R. A. M. C. (T.). 3s. 6d. net.

INJURIES OF JOINTS. Robert Jones, F. R. C. S. (Eng.), Major R. A. M. C. (T.). 3s. 6d. net.

GUNSHOT INJURIES OF BONES. E. W. Hey Groves, F. R. C. S. (Eng.), Captain R. A. M. C. (T.). 3s. 6d. net.

INJURIES OF NERVES. Purves Stewart, M. D., F. R. C. P. (Lond.), Colonel R. A. M. C. (T.); Arthur H. Evans, F. R. C. S. (Eng.), Captain R. A. M. C. (T.). 3s. 6d, net.

WOUNDS OF THE THORAX IN WAR. J. Keogh Murphy, M. C. (Cantab.), F. R. C. S. 2s. 6d. net.

ABDOMINAL INJURIES. Professor J. Rutherford Morison, F. R. C. S. (Eng.), Hon. Staff-Surgeon R. N. V. R. 2s. 6d. net.

INJURIES OF THE EYES, THROAT, NOSE AND EARS. A. Maitland Ramsay, M. D. (Glas.), Major R. A. M. C. (T.); J. Dundas Grant, M. D., F. R. C. S. (Eng.), late Major R. A. M. C. (Post Office Rifle Volunteers); H. Lawson Whale, M. D., (Camb.), F. R. C. S. (Eng.), Captain R. A. M. C. (T.); C. Ernest West, F. R. C. S. (Eng.), Captain R. A. M. C. (T.). 2s. 6d. net.

NERVE INJURIES AND SHOCK. Wilfred Harris, M. D. (Cantab.), F. R. C. P. (Lond.), Captain R. A. M. C. (T.). 3s. 6d. net

MEDICAL HINTS. J. Edward Squire, C. B., M. D., F. R. C. P. (Lond.), late Lieutenant-Colonel (Hon. Colonel) R. A. M. C. (V.). 2s. 6d. net.

THE STRETCHER BEARER. A Companion to the R. A. M. C. Training Book. Georges M. Dupuy, M. D., Stretcher Bearer Ambulance Section (C.), Norwood Co., Lambeth Battalion, V. T. C. 2s. net.

It is a striking fact that the man engaged in general surgery as seen in hospitals today is rarely called upon to exercise his inventive faculty for the benefit of those who have been severely injured in accidents. It will be interesting to see how American surgeons will acquit themselves if they are ever called upon by the victims of war. American surgical literature of the last two generations offers no help. These little Oxford War Primers of Medicine and Surgery in flexible bindings are monographs on regional injuries, pocket size, of no use to the present day surgeon, except to our brothers in the Army and Navy. The general practitioner, should he ever be drawn for service in war, by the help of these books, would be able to brush up so that he could qualify in a few days for the care of injuries in the Field Hospitals. E. A. S.

DISEASES OF THE NOSE AND THROAT. By Algernon Coolidge, M. D., Professor of Laryngology in the Harvard Medical School. 12mo of 360 pages, illustrated. W. B. Saunders Company, Philadelphia and London, 1915. Cloth, \$1.50, net.

On the whole this volume is far too simple and elementary for even the student of general medicine for whom it is intended and as for giving the practitioner of medicine anything to aid him in his work it is very poorly put together.

The chapter on examination is elementary to a very high degree. It deals only with the very gross methods of examination leaving out entirely the finer points in examination. The anatomy of the nose is very inadequately dealt with and rothing whatsoever is said concerning the nerve and blood supply of the nose.

In the chapter on deformities of the septum, the author very correctly relegates to the obsolete all operations on the septum with the exception of the submucous resection, for this can be adapted to any class of septal deformity.

One must certainly object to the use of the term catarrhal rhinitis by a scientific physician.

The section on hay fever is well written and concisely put together. No unproven theories are presented.

In the chapter on diseases of the accessory sinuses no mention is made of the hyperplastic form of chronic sinus disease. No mention is made of the Canfield or Denker operations and the entire subject matter is very loosely and inadequately handled in 19 pages of text.

On the whole the book is very disappointing, the illustrations are all diagrammatic and the subject matter is very poorly treated for even the most elementary of text books.

W. E. G.

SURGERY OF THE BLOODVESSELS. By J. Sheldon Horsely, M. D., F. A. C. S., Surgeon-in-Charge, St. Elizabeth's Hospital, Richmond, Va., etc. 304 pages, 89 illustrations. Price, \$4.00. C. V. Mosby Co., 1915, St. Louis.

In this modest volume of some three hundred pages the reader will find a well written thesis upon the subject in hand by an author well entitled to a hearing. It begins with the histology of the bloodvessels-a chapter which is possibly too brief. An interesting and fairly complete chapter upon the historical aspect of the subject follows. The chapters on general technique and transfusion are clearly, fully and explicitly written and embody the results of the author's clinical experience, and of original investigation and experiment along these lines; they make interesting reading for either the laboratory man or the surgeon. Chapters on thrombosis and embolism elucidate the practical side of these subjects and emphasize, not unduly, the ever present dangers of emboli in cases of sepsis or injury. The subject of aneurisms is well presented-symptoms, diagnosis and treatment, both medical and mechanical, that is to say surgical, including a careful exposition of the epoch-making operation of Matas.

Elsewhere are discussed the subjects of angieomata, varices, varicose veins, varicocele, and haemorrhoids; and

altogether the book seems filled with a lot of useful and practical things. Some of them, it is true, are compilations, but they are reliable and up-to-date—more are, as intimated above, the results of the author's clinical experience and experimentation; And all are evidently set forth with the wish to be wholly useful to his fellow-students and practitioners. On our shelf of monographs, Horsley is certainly worthy of a place. W. A. B.

BANDAGING. By A. D. Whiting, M. D., Instructor in Surgery at the University of Pennsylvania. 12mo of 151 pages, with 117 original illustrations. W. B. Saunders Company, Philadelphia and London, 1915. Cloth, \$1.25 net.

This book is a complete exposition of the art of bandaging, easily followed, and is not only adaptable for the use of nurses or students, as its author says, but many a patient would have reason to feel grateful if his surgeon would defer to this author.

E. A. S.

OPERATIVE GYNECOLOGY. By Harry S. Crossen, M. D., F. A. C. S. 670 pages and 770 illustrations. Price, \$7.50. C. V. Mosby Company, St. Louis, 1915.

As a companion piece to Dr. Crossen's book on Diagnosis and Treatment of Diseases of Women, published in 1907, now in its second edition, this last work completes a valuable set of gynecological literature. With the same clearness and precision which characterizes the first book, the author has dealt with operative technique.

The first chapter deals with displacements of the uterus, describing and classifying twenty operations, and affixing the names of the originators to each individual operation. After a perusal of this chapter there is nothing much left to be said on displacements.

The second chapter deals with prolapse, and is characterized by the same careful classification of operations.

The following chapters on fistula, fibroids, carcinoma, inflammatory conditions, ovarian tumors, etc., are particularly clear and decise.

A word must be said in regard to the 770 illustrations. They are semidiagramatic, and a wonderful aid in the interpretation of the text. It is a pleasure to have at hand an operative guide so thoroughly reliable, and so carefully and systematically arranged. The edition deserves the unqualified endorsement of the profession.

G. A. C.

A GUIDE TO GYNAECOLOGY IN GENERAL PRACTICE. By Comyns Berkeley, M. A., M. D., M. C., F. R. C. P., Gynaecological Surgeon to the Middlesex Hospital, and Victor Bonney, M. S., M. D., B. Sc., F. R. C. S., Assistant Gynaecological Surgeon to the Middlesex Hospital. 415 pages, fully illustrated. Oxford University Press, 1915. Price, \$6.50.

This Gynaecology is not only a guide but a valuable book of reference as well to the general practitioner. The subject matter is divided into five parts. The first part describes fully gynaecological methods of examination, which are represented clearly by many excellent illustrations. The next portion of the book takes up the discussion of gynaecological conditions through the presenting subjective symptom. There are excellent chapters on Amennorrhoea, Menorrhagia, and Abdominopelvic pain. The third part of the book takes up the interpretation of physical signs as they are found upon examination. The fourth part deals with the treatment of pelvic disorders, the general and medicinal treatment being clear, detailed and practical. Surgical measures for the relief of gynaecological disorders are mentioned and their applicability to certain conditions discussed. Surgical technique is not within the scope of the present work and is not mentioned. The fifth part is an interesting discussion of the medico-legal aspects of gynaecology.

As a gynaecology of reference for the general practitioner, nothing more could be desired. It gives exactly the information necessary for the correct diagnosis and treatment of diseases of the pelvic organs. The classification and method of taking up these diseases under important subjective or objective signs and symptoms is given together with a very full differential diagnosis of all conditions causing each symptom. These features make it of particular value. Discussions of elementary anatomy, physiology, and embryology are conspicuous by their absence. This book fulfills in a very satisfactory manner the place it is supposed to take, namely, a valuable reference book on Gynaecology for the general practitioner of medicine.

B. B. R.

AMERICAN ILLUSTRATED MEDICAL DICTIONARY (DORLAND). New (8th) Edition, Revised and Enlarged. A new and complete dictionary of terms used in Medicine, Surgery, Dentistry, Pharmacy, Chemistry, Veterinary Science, Nursing, Biology, and kindred branches; with new and elaborate tables. Eighth Revised Edition. Edited by W. A. Newman Dorland, M. D. Large octavo of 1135 pages, with 331 illustrations, 119 in colors. Containing over 1500 more terms than the previous edition. W. B. Saunders Company, Philadelphia and London, 1915. Flexible leather, \$4.50 net; thumb index, \$5.00 net.

Dorland's Illustrated Medical Dictionary has two sizes: big enough so that you never have to consult any other, and small enough to take in one hand while you look up a word. This Eighth Edition is a little fatter than its brothers but it has the same familiar dress which makes it so easy to pick out from your library when in haste for a word. Dorland is a most able and satisfying consultant.

E. A. S.

APPLIED IMMUNOLOGY, THE PRACTICAL APPLICATION OF SERA AND BACTERINS PROPHYLACTICALLY, DIAGNOSTICALLY AND THERAPEUTICALLY, WITH AN APPENDIX ON SERUM TREATMENT OF HEMORRHAGE, ORGANOTHERAPY AND CHEMOTHERAPY. Thomas, B. A., and Ivy, R. H., Philadelphia. 359 pages with 5 colored inserts and 68 illustrations in text. Cloth, \$4.00. J. B. Lippincott Co., Philadelphia and London.

This well gotten up work will be heartily welcomed not only as an excellent exposition of the essential facts of immunology but also as a reliable adviser in the practical application of the different methods. The authors themselves state that "the primary object has been to crystallize and detail the practical phases of serum and bacterin application in medicine, thereby enabling the student and general practitioner, with even a slight laboratory experience, to appreciate the significance of, and more competently apply the principles underlying, immunology. In order to render the treatise more complete allusion has been made in places to certain allied substances that have been utilized from time to time in attempts at immunization with a consideration of their merits and demerits."

After an introduction on immunity, immunization, natural and acquired immunity, the subject matter is divided into chapters, to mention only a few, on antigens and antibodies, anaphylaxis, antitoxic and antibacterial sera, agglutinins, precipitins, lysins, fixation of complement, miscellaneous biochemical reactions, etc. tuberculin therapy and the application of bacterial inoculations are described in detail, considering in succession the different organs and diseases amenable to it, prophylactically and therapeutically. In an appendix the serum treatment of hemorrhage, organotherapy and chemotherapy are excellently presented with many illustrations. Therapeutic dosc tables are given, and the glossary at the end will be a great help by its accurate definitions to many who are not familiar with the terminology of this recent branch of medicine. All in all this practical and useful book deserves the heartiest recommendation. C. ZIMMERMANN.

A TEXT-BOOK OF THE PRACTICE OF MEDICINE. By James M. Anders, M. D., Ph. D., LL. D., Professor of Medicine and Clinical Medicine, Medico-Chirurgical College, Philadelphia. Twelfth edition, thoroughly revised. Octavo of 1336 pages, fully illustrated. W. B. Saunders Company, Philadelphia and London, 1915. Cloth, \$5.50 net; Half Morocco, \$7.00 net.

Ander's Practice, whose popularity has called for twelve editions, is a book whose worth is well recognized. This new edition has been carefully revised and contains in an easily accessible form the information concerning new methods of treatment and diagnosis. The new material contained in the 12th edition embraces discussions on large-cell splenomegaly, tuberculosis of the thyroid gland, hypophysis, obesity, acute anterior poliomyelitis, neo-salvarsan, Schick's test, Complement-deviation test in Pertussis, Barany's, and Neumann's test in diagnosis of labyrinthine disease.

Ander's Practice is one of the most valuable single volume works on the practice of medicine in the English language. It is a fund of detailed, dependable and practical information concerning the etiology, diagnosis and treatment of disease, and as a book of reference, Anders deserves a place in our library side by side with the indispensable Osler.

B. B. R.

DISEASES OF THE SKIN. By H. H. Hazen, A. B., M. D., Prof. of Dermatology in the Medical Department of Georgetown University; Prof. of Dermatology in the

Medical Department of Howard University; Sometime Assistant in Dermatology in the Johns Hopkins University; Member of the American Dermatological Association. 539 pages. Cloth, \$4.00. C. V. Mosby Co., Publishers, St. Louis, 1915.

This text adds another to an already rather large number of briefer textbooks on Diseases of the Skin. As each new text appears one wonders why another should be added. Each author however has his own individual way of treating the subject and one can usually find something about each new text to make it really worth while. Dr. Hazen has given his book a distinctive feature which aside from its other excellent qualities should give it a place in many a medical library. This feature is a key to diagnosis arranged much on the plan of the keys in botanies for the identification of plants. To one not thoroughly familiar with the diagnosis of diseases of the skin this key should be a very valuable aid.

Dr. Hazen's work being done largely in Washington and Baltimore has brought him in contact with the negro and his special reference to the peculiarity of the eruptions on the skins of negroes should be a great help to our southern confreres. I know of no other work on Dermatology which makes a feature of the skin diseases of the negro.

The Histopathology of the various diseases of the skin also gets a generous consideration in Dr. Hazen's book. This is a field also largely neglected, especially in the smaller works on Dermatology but it is of such importance that it is particularly pleasing to find it given so prominent a place.

For a first edition it is remarkably free from typographical errors. The text is clear and the illustrations both in monochrome and colors, mostly from Dr. Hazen's own cases, are clear and well selected.

This text should make a valuable one for medical students because of the brevity and clearness with which the various diseases are described and illustrated.

R. G. W.

LABORATORY METHODS WITH SPECIAL REFERENCE TO THE NEEDS OF THE GENERAL PRACTITIONER. By B. G. R. Williams, M. D., Member of Illinois State Medical Society, American Medical Association, etc., and E. G. C. Williams, M. D., formerly Pathologist of Northern Michigan Hospital for the Insane, Traverse City, Mich., with an Introduction by Victor C. Vaughan, M. D., LL. D., Professor of Hygiene and Physiological Chemistry and Dean of the Department of Medicine and Surgery. University of Michigan, Ann Arbor, Michigan. Third edition, revised octavo, 214 pages with 43 engravings. Cloth, \$2.50. C. V. Moseby Company, St. Louis.

This short practical volume has been especially prepared for the use of busy practitioners whereby they are enabled to make use of simplified methods in conducting certain examinations and laboratory tests. The authors have succeeded in showing that efficient laboratory work can be done at a small cost and they have wisely given only the essential methods that can be readily employed by the average physician. A very commendable feature of this short manual is the outline, at the beginning of each chapter, of the apparatus and

reagents required for the tests in question. This short treatise is an invaluable addition to the armamentarium of the busy practitioner.

H. T. K.

SIMPLIFIED INFANT FEEDING. By Roger H. Dennett, B. S., M. D., Adjunct Professor of Diseases of Children, New York Post-Graduate Medical School. Attending Physician of the Children's Department New York Post-Graduate Hospital; Assistant Attending Physician at the Willard Parker Hospital and the Red Cross Hospital, New York. 339 pages with 14 illustrations. Price \$3.00. J. B. Lippincott Co., Philadelphia, Publishers.

In this convenient volume Dr. Dennett presents in book form the methods which he has found most effective in teaching post-graduate students. The author tells very clearly and directly what to do and how to do it. There is no space devoted to theorizing; everything is practical. This method has its advantages and its disadvantages, but for the average medical man the advantages are by far the greater.

It is unfortunately true that many of the works written on the subject of infant feeding go over the heads of those physicians who have not devoted special study to this department. It may be said that every physician ought to devote special study to it on account of its great importance. But in the crowded curriculum of today not every man can do it and so the number of physicians is large to whom Dr. Dennett's book would come as a real help and inspiration.

The methods of diagnosis and treatment are illustrated by 75 case reports scattered through the book. These are of a most interesting character and the compact form in which they are presented may well serve as a lesson in recording case histories.

The volume is well illustrated and is thoroughly readable.

A. W. M.

MANUAL OF OBSTETRICS. By Edw. P. Davis, A. M., M. D., Professor of Obstetrics in the Jefferson Medical College. 12mo of 463 pages, with 171 illustrations. W. B. Saunders Company, Philadelphia, Pa., 1914.

In his efforts to make his book concise the author has, in the opinion of the reviewer, omitted some very important subjects in modern obstetric surgery. In a compend to be used as a guide for the general practitioner and student such omissions are quite prejudicial to the value of the book.

Neither in the chapter on the hygiene of pregnancy, nor the chapter on the toxemias is there any word urging the value of routine blood pressure readings as an aid in the prophylaxis or the diagnosis of this, the most serious complication of pregnancy.

The routine use of Silver Nitrate in the eyes of the new born as a prophylactic measure against ophthalmia neonatorum is also omitted in the paragraph which treats of the immediate care of the child.

On page 146, the author recommends a vaginal douche following the withdrawal of the uterine pack for inevitable abortion. Modern obstetric technique condemns such practices as unsurgical. The mechanics of obstetric surgery are well treated from a practical standpoint.

W. G. D.

# The Wisconsin Medical Journal

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Number 11

## ORIGINAL ARTICLES

THE SCHICK TEST IN MILWAUKEE HEALTH DEPARTMENT WORK.\*

BY LEOPOLD SCHILLER, M. D.,

MILWAUKEE.

The prevention of the spread of communicable diseases is the primary object of all efforts in epidemiological work and every advancement made in the means of attaining this end should be adopted by us as soon as its value has been sufficiently proven.

The Schick test is a distinct advancement.

In November, 1913, B. Schick, Privat Dozent in Vienna, working under Von Pirquet, first published the results of his research to arrive at a practical method for determining the relative susceptibility of individuals to diphtheritic infection. His method, now called the Schick test, is dependent on the local irritant action of a minute quantity of diluted diphtheria toxin injected into the skin of an individual in whom the protective antitoxin is absent or insufficient in amount.

It has been determined that persons who contract diphtheria do so because they have not a sufficient amount of antitoxin to render them immune. The amount of antitoxin necessary to insure immunity has been estimated by Loos, Karasawa, Schick and others to be about 1/30 unit for every c.c. of blood. While this quantity may be necessary for absolute immunity, a smaller amount may be sufficient in many instances. Von Behring is of the opinion that 1/100 unit is generally sufficient to insure immunity.

The object of a prophylactic injection of antitoxin to an individual exposed to diphtheria is to supply this deficiency and thus render him temporarily immune to the disease. If, therefore, we possess a reliable test by means of which we may determine the relative susceptibility to diphtheria

\*Read at the 69th annual meeting of the Wisconsin State Medical Society, Milwankee, Oct. 6-8, 1915.

we are then able to decide whether a prophylactic dose is necessary or not, thus obviating its indiscriminate use. According to the researches of Wassermann, Fischl, Karasawa, Loos, Schick and others, it has been found that about 90 per cent of adults, 80 per cent of infants less than one year old, and between 50 per cent and 60 per cent of all older children possessed the necessary amount of protective antitoxin.

In subjects susceptible to diphtheria, a distinct specific skin reaction is produced, while in those who are immune this reaction does not take place. In making the test a 1 or 1.5 c.c. all glass syringe is used, graduated in tenths, the same as is employed in tuberculin injections. A 22 to 24 gauge short platinum-iridium or nickeloid needle with a sharp, comparatively short point is preferable for the reason that the needle must be inserted just a sufficient distance to completely cover the opening which must be directed upward. The amount to be ordinarily injected represents about 1/50 part of a lethal dose of toxin for a guinea pig weighing about 250 grammes. The site selected for the injection is the upper third of the flexor surface of the forearm which has been rendered aseptic with soap and alcohol. This intracutaneous injection produces a whitish wheal about 1/3 inch in diameter, which subsides in a very short time and gives way to a red spot which also disappears in the course of a few hours. In the positive cases a distinct bright red spot 1/3 to 2/3 inch in diameter appears around the point of injection within six to eight hours. This spot soon becomes slightly infiltrated and reaches its maximum of intensity within forty-eight hours. The infiltration generally subsides within a week and is followed by more or less marked desquamation and pigmentation. This pigmentation will remain for months and very gradually disappear.

Larger doses than 1/50 M. L. D. up to 1/25 have been injected with the purpose of obtaining a larger percentage of positives, without materially altering the result. When, however, too large a dose of toxin is used it may result in a certain amount of superficial necrosis. In such a case the

center of the infiltration assumes a pale gelatinous appearance, while the periphery is intensely red. In the course of events, this does not lead to any appreciable tissue defects, but the subsequent desquamation and pigmentation are simply accentuated. The degrees of susceptibility are indicated by variations in the intensity of the reaction, and such cases as are not decidedly susceptible give only a faintly positive reaction, the desquamation and pigmentation following being but slightly marked. The faintly positive reaction must not be confounded with the so-called pseudo-reaction. This reaction occurs in a certain number of cases, averaging about 8 to 10 per cent and is shown by a red, oedematous, irregularly, and indistinctly outlined patch rather larger than that of the true reaction, appearing within the first twenty-four hours and disappearing one or two days later, leaving the skin normal in appearance without desquamation or pigmentation. This phenomenon is explained by Park, Zingher and Serota as a local anaphylactic reaction in a sensitized skin due to the protein elements of the bouillon in which the toxin is dissolved. Kolmer and Moshage have made control tests with similar dilutions and quantities of toxin and plain bouillon and have found similar reactions to take place in about 5 per cent of cases. In the practical interpretation of the Schick test, where time is of importance, it is advisable to regard these as positive and treat them accordingly, while a few days' observation could have proven them Schick negative. As a rule the Schick reaction can be depended upon as a permanent individual characteristic. Certain infectious diseases, however, such as measles and influenza, have been found to convert a Schick negative into a positive. This discovery is in conformity with what has been clinically observed before, namely, that a disease which reduces the resistance of the individual renders him more liable to contract other contagious diseases. It would, therefore, be good practice when diphtheria develops in an institution for the care of children, to retest all such inmates as have recently been afflicted with some acute contagious disease.

Our most extensive experience with the Schick test has been in connection with the Home for Dependent Children of Milwaukee County. Through the courtesy of Mr. Kringel and with the assistance of Dr. Fellman it was made possible for us to make these tests. The table following shows the reactions of 309 cases, ranging in age from

5 months to 43 years, all those above 16 years being attendants and nurses stationed at the institution. The figures show approximately the same results as those obtained by Schick, Park, Bundesen, and others.

SCHICK REACTIONS IN 309 CASES.

	NUMBER OF CASES.					
AGE.	Total	Positive	Faintly Positive	Pseudo- reactions	Negative	Per Cent Positive
Less than 1 year	9				9	%
1 to 2 years	14	4	3		7	50. %
2 to 3 years	16	10		1	5	62.5%
3 to 5 years	25	11			14	44. %
5 to 7 years	48	11	11	5	21	42.5%
7 to 10 years	58	8	11	5	34	32.8%
10 to 14 years	96	9	19	10	58	29.2%
14 to 24 years	31	3	4	3	21	22.5%
24 to 43 years	12	3		2	7	25. %
	309	59	48	26	176	35. %

As will be seen, we have included all the faintly positives in the positive grouping, while the pseudoreactions have been included in the negative. Thus we have in the "faintly positive" a goodly number of cases that are partially immune, and could probably weather an attack of diphtheria with very little, if any, antitoxin.

We are most forcibly impressed in studying these reactions with the frequency with which negatives or positives appear in family groups. Thus we find almost invariably that if the older children of a family group are Schick positive the younger ones will also show positive reaction, while vice versa, if the younger ones show negative, the older ones will react in the same manner. This corresponds with the clinical observation that susceptibility and immunity are very frequently family characteristics, unfortunately, however, usually recognized when it is too late. The exceptions in families do not in any way invalidate the rule.

We frequently find that diphtheria immunes harbor Klebs-Loeffler bacilli of the virulent type in the naso pharynx without themselves contracting the disease, while they are capable of communicating it to others whose lack of antitoxin renders them susceptible, and they in turn contract diphtheria in its most virulent form. The detection of these diphtheria carriers is of vital importance in

the control of epidemics arising among the children in schools or other institutions.

The percentage of diphtheria carriers is found to vary from about 1 per cent to about 5 per cent, this depending upon the absence or presence of a diphtheria epidemic at the time of investigation. During a late epidemic, W. H. Park of the New York Health Department Laboratory found as high as 5 per cent of cases examined to be carriers, while E. V. Brumbaugh of the Milwaukee Department found approximately 3 per cent in badly infected schools.

Given a case of diphtheria occurring in a family, the following course of procedure is, in my opinion, the most effective from a preventive point of view. First—The Schick test to be made on all the members of the household, so that within twenty-four hours all those responding positively can be immunized, the negatives requiring no antitoxin. Second—A culture of the throats to be taken and all positives to be considered diphtheria carriers, isolated and treated until they are satisfactorily proven diphtheria negative, before being released from quarantine. This method of procedure would positively limit the disease in this particular unit of the community. If conscientiously carried out in all instances, this plan would virtually eradicate the disease from the entire community. In order to make such an effort successful it is necessary to have the proper individual co-operation of the medical profession.

In the differential diagnosis of throat conditions other than diphtheria, the Schick test may be of great assistance. From time to time we meet with cases of clinically simple follicular tonsillitis, while an examination of cultures reveals the Klebs-Loeffler bacillus. If left to themselves, without antitoxin, these cases run the course of a simple tonsillitis. It is our opinion that these cases are diphtheria carriers in whom a simple follicular tonsillitus has developed. If the Schick test is used, at the same time that the swab is taken, it will show these to be immunes, and thus render the use of antitoxin unnecessary. While it must be generally admitted that antitoxin should be administered as early as possible in all cases in which it is required, by means of the Schick test we are in a position to forego its use in all except eases of true diphtheria. This, however, does not lessen the need of isolation in the eases above described.

Soon after entering upon our service at the South View Municipal Hospital for Contagious

Disease, we established the routine practice of injecting antitoxin in immunizing doses in all patients entering the scarlet fever wards. Although this method of prophylaxis was rather expensive, it prevented completely in these wards the occurrence of diphtheria complications, which was sufficiently common before this method was put into operation. Since March, 1915, no immunizing doses of antitoxin were given to any except to those who gave a positive Schick reaction, and the results have been equally satisfactory. This has obviated the necessity of giving the antitoxin in about 75 per cent of the cases admitted, thus eliminating a certain amount of discomfort to the individual and expense to the department.

By using the Schick test on all the nurses and employes of the hospital, we have been able to dispense with their immunization. Among fifteen so tested we found one Schick positive and one gave a distinct pseudo-reaction.

Of late A. Zingher of the New York Health Department Laboratory has devised an ingenious, practical and inexpensive outfit for the application of the Schick test, and this will probably be the means of making its use more available to the general practitioner. This outfit consists of a capillary tube, similar to that used for glycerinated vaccine virus, which contains, carefully measured, two lethal doses of diphtheria toxin for a 250 gram guinea pig. When about to be used, this is expressed into a 10 c.c. 1/2 per cent phenolated normal saline solution contained in a small glass vial holding exactly this amount. While the capillary tubes can be kept at a low temperature for at least six months, without deterioration, the diluted solution, ready for use, must be freshly prepared at the time of its application, as it will not keep longer than about twelve hours. The cost of these toxin tubes is so small that even if but a few tests are to be made at one time the monetary consideration would be of negligible importance. Ordinarily about eighty tests can be made with a 10 c.c. vial of diluted toxin. Without doubt these capillary tubes will soon be obtainable in the open market, and the Schick test will then be within the reach of all, and become a procedure of common application.

## SUMMARY.

1. The Schick test is of great value in determining the individual susceptibility or immunity

to diphtheria, and who among those exposed to the disease should be immunized.

- 2. The most susceptible age is from the first to the sixth year, after which time the percentage of immunes gradually increases.
- 3. Susceptibility is often a family characteristic, clearly shown by the Schick test.
- 4. The test may be used as a means of diagnosis in doubtful throat affections, often obviating the use of antitoxin, and thus reducing expense and physical discomfort.
- 5. It is good practice to test institutions and entire communities for diphtheria susceptibility. These tests might be repeated at intervals of two to three years, and their record kept in families and institutions.
- 6. The danger of cross infection in scarlet fever wards can be minimized by giving only such patients as give a positive Schick reaction, immunizing doses of antitoxin, thus allowing a considerable reduction in antitoxin bills.

### DISCUSSION.

Dr. E. V. Brumbaugh, Milwaukee: The principal value of the Schick reaction lies in its application to institutions where a considerable number of inmates are gathered together, for the reason that the item of the expense of the immunization of a large number of individuals with diphtheria antitoxin is one which must be seriously considered where a number of individuals are to be immunized. The occurrence of a single case of diphtheria in an institution is fraught with alarming consequences, if that infection be spread from one individual to another, and of course it is necessary to immunize against infection all who are susceptible. The Schick reaction thus gives a means of determining the necessity of such administration of prophylactic antitoxin,

One point must be emphasized, with regard to the administration of the Schick reaction, and that is the absolute freshness of the toxin at the time of administration. It might be stated that that requirement applies to all other biological products. A recently made survey of the drugstores of the city of Milwaukee with reference to the means and facilities for keeping biological products, shows a very alarming and unsatisfactory condition. Antitoxins, bacterius, smallpox vaccines, and biological products generally, are kept upon open shelves, where they are exposed to various and marked degrees of changes in temperature, and unquestionably this exposure results in a marked deterioration of the toxin. This is true of the toxin in the Schick reaction.

Another point to be emphasized particularly in the Schick reaction is, that the reaction is epidermal only, and not a subcutaneous reaction, and that the subcutaneous administration of the toxin will be useless for diagnostic purposes.

While a positive Schick reaction indicates prophylactic antitoxin, a better method for prophylaxis is the gradual development of a naturally acquired immunity rather than the passive immunity produced by pathologic antitoxin.

The principle of this reaction depends upon the ad ministration simultaneously of small doses of diphtheria toxin and antitoxin together, a combination of the two reagents being a lasting combination, which is gradually broken down in the body tissues. The toxin thus liberated stimulates the body cells and causes the body to gradually produce its own antitoxin, which is of more lasting value.

Diphtheria antitoxin, when administered subcutaneously, loses its prophylactic value in a comparatively short time, in some cases as short a time as two weeks; the natural toxin produced by the toxin and antitoxin mixture after the method of Zingher, of the New York Board of Health, is more slow in the production of the antitoxin, ten days to two weeks being necessary for the full development of the antitoxin in the body; but the antitoxic power thus produced is of much greater duration.

The point made in the paper this morning, with regard to the complete number of negative Schick reactions in infants under one year, is of great significance. Nevertheless, that diphtheria does occur in those infants is a marked condition, and a very important point to be noted in connection with it is that the diphtheria in those cases is of an exceedingly virulent type. In the city of Milwaukee, in 1914, out of eleven cases of diphtheria among infants under one year of age, there were five deaths, and among children between the years of one and two, of thirty-six cases, there were twenty-three deaths; whereas, among the cases of diphtheria in those individuals between the ages of fifteen and twenty-five years, 107 cases in all, there was only one death; and the record of 1,063 cases of diphtheria shows a total mortality of 134 cases.

Dr. L. Schiller, Milwaukee: I have nothing to offer in so far as I was unfortunately late in coming in on Dr. Brumbaugh's remarks, and I do not think I have anything to add to what I have put into my paper.

Typhoid in the Vaccinated. Bernard and Paraf (Annales de Medecine, Paris. October, 1915) review their experience with 800 typhoid cases among soldiers. Cultures were made from the blood in 325 cases, with negative findings in 189. Typhoid bacilli were found in 32 who had not been vaccinated, and in 45 who had been vaccinated; paratyphoid bacilli in 26 non-vaccinated, and in 222 of the vaccinated. This material includes 26 men who had been thoroughly vaccinated against typhoid. The disease presented the usual clinical picture in them and in five was of a severe type, but none died; two developed suppuration in the skin during convalescence and the psychic condition called mental puerilism. On the whole, the exceptional mildness of the disease in the vaccinated was noticeable.—Jour. Amer. Med. Assn.

# NON-DIABETIC ACETONEMIA.\* BY M. R. WILKINSON.

OCONOMOWOC.

Non-diabetic acetonemia is so frequently before the Internist in his work, and is given such meager attention by different writers, that I deem it highly worthy of our consideration.

As the name indicates, non-diabetic acetonemia is the presence of acetone and its congenors, beta-oxybutyric acid and diacetic acid, in the blood of an individual not suffering with diabetes.

We find its presence first manifested by a sweet, fruit-like odor of the breath. It is present in many of the acute fevers and also in some chronic ailments. But the form which I wish more particularly to call to your attention for consideration and discussion is the so-called acidosis, cyclic, and recurrent vomiting of childhood.

This ailment has been one of the keenest interest to me for the past twenty years, but it has been only within the past few years that I have been able to find anything written upon the subject, and the different writers vary so much in their opinions regarding it and their descriptions of it, that it makes the interest all the more intense. It shows that more attention and critical observation of cases, with reports of same, is necessary to get a complete symptomatology.

It occurs most frequently between the second and eighth years of age. It attacks both sexes, but most frequenty females. Often more than one child in a family is attacked at or about the same time.

It apparently is not from dietetic error as, of five children eating at the same table, one will be taken ill while the other remains in good health.

It is also peculiar that the so-called "street arab," whose diet is regulated in no way, is scarcely ever attacked.

One writer classes the children as neurotics. In my experience it attacks those of nervous type but not necessarily neurotic, as the children are normal at other times, and in some cases exceptionally well developed physically.

The onset is one of malaise, restlessness, loss of appetite, and sometimes pain in the stomach and intestines of a gripping character, with constipa-

tion the rule, although in a relatively small number of cases diarrhea is present. Vomiting usually sets in within a few hours, and recurs at intervals of a half hour to two hours. There is a distaste for everything but water, which, if given, usually precipitates another attack of vomiting.

The vomiting is projectile in character. The stomach contents are first ejected and contain but little food as the attack usually supervenes some hours after having eaten. Later the vomit is usually watery, at times containing brownish flakes, and again slight streaks of blood. Sometimes bile is vomited and at other times nothing but a frothy mucus is seen. This vomiting usually lasts a couple of days but in severe cases may last a week. There is rapid loss of flesh. Acetone is also noticed in the urine and in the bowel movements. The expression is apathetic, the eyes bright, the skin dry, and fever is usually present, and may vary from a half a degree to four or five degrees above normal. A high fever I do not regard as an untoward sign, as many of those cases recover most quickly. In cases in which diarrhea is present, the stools are quite offensive in odor, and in severe cases shreds and pieces of the lining of the intestine come away. In three cases of this disease in the severe form restlessness increased and rolling of the head from side to side developed. Coma at times was present with the lids half opened and upturned eyes. The pulse slowed down and a typical involvement of the meninges showed. These three cases proved fatal. In another case haematuria was present for several days but complete recovery followed. Another case with slight fever resembled a chloroform narcosis and the most vigorous flushing of the bowels with high rectals of castor oil, massage of the bowels with the same, and different laxatives administered by the mouth and even introduced in large quantities with the stomach tube, failed to bring about a bowel movement.

As to the morbid anatomy, Frederick Langmead of England states that in five autopsies performed, fatty degeneration of the liver was found. The liver was usually of a canary yellow color and microscopically showed extreme fatty change in the lobules near the portal canals. Slighter fatty changes were found in other organs. In four cases necrotic changes were found in the mucosa of the stomach and intestine.

Etiology. Von Noorden states that the latest theory is that acetone and diacetic acid are derived

<sup>\*</sup>Read at the 69th meeting of the State Medical Society of Wisconsin, Milwaukee, Oct. 6-8, 1915.

from beta-oxybutyric acid, and that oxybutyric acid is derived from the fatty acids.

He also states that the formation of the acetone series is due to a peculiar inhibition of the oxidative process and that the presence of carbohydrates in the system either prevents the formation of the acetone series or destroys them. On account of the infected condition of the stomach and intestine it seems some ferment or germ starts the process and then the poison is taken directly to the liver by the portal vein and a perversion of metabolism ensues.

There are such enormous quantities of the acetone group produced synchronous with the rapid destruction of the fat of the body that it seems that the fat was broken up into the acetone series.

Treatment. In some cases the nausea and vomiting is so persistent that it seems for a time impossible to control it, but all seem well agreed that the liberal use of alkaline treatment to overcome the poisonous effects of the acids is the proper course to pursue. This has been the course which I have followed, but in addition have used one-tenth grain doses of calomel which seem well borne. In addition to this symptomatic treatment as each individual case required.

The diet should consist chiefly of water and easily digested carbohydrates.

#### DISCUSSION.

Dr. H. A. Peters, Oconomowoc: Mr. President and Gentlemen: This particular subject has been a topic which has aroused my interest several times in cases that I have had under observation, and I must say that Dr. Wilkinson has covered the ground very thoroughly. It is a fact that the information you are able to glean from literature regarding this malady is very meager, and the only theory that you can go upon that will at all enable you to arrive at any conclusion is the Von Noorden theory with reference to diabetes. In diabetes the acetone bodies form through chemical processes. In the non-diabetic form you at times find that, while you are unable to attribute it to any indiscreet feeding, or anything of the kind, yet possibly within twenty-four hours you have a very pronounced case of acetonemia, which in a degree, speaks against the non-oxidation of carbohydrates. Why should an individual who is apparently in perfect health, showing no signs of gastric disturbance, in possibly twenty-four hours show all the symptoms of acidosis? It goes to show that possibly there is some other cause producing this acidosis in this class of individuals. In Von Noorden's theory, with reference to the formation of acetone, he claims that the oxidation of carbohydrates is incomplete, and as a result of this the fats are oxidized into beta-oxybutyric acid, diacetic acid and acetone. This condition arising, has a tendency to acidulate the system; it reduces the alkalinity of the blood, and in so doing, the system is deprived of its alkaline bodies, and the blood, instead of retaining its normal alkalinity, is reduced, and the result is that the system tries to overcome the reduction of alkalies by attacking the nitrogenous bodies, which are converted into ammonia instead of urea.

I cannot help but feel that there may be something in one theory that has been advanced more recently, with reference to the internal secretion. Why is it not just as reasonable to assume that the fact that the various ductless glands which secrete their products maintain a certain equilibrium? Why is it not reasonable to assume that the sympathetic nervous system at this time becomes profoundly disturbed; that this equilibrium is destroyed, and that we have a condition of direct fat oxidation? The deficiency of carbohydrates, which is advanced by Von Noorden and others, we are unable to demonstrate to our satisfaction in a clinical way. I think that the time is ripe for further investigation along these lines, and I believe that eventually we will be satisfied that this is more a condition arising from a lost equilibrium of the various ductless glands, which are directly influenced by the nervous system. The important thing in all these conditions, and which substantiates the probability that we are dealing with more or less of an intestinal condition is, in every one of these cases you will find a very strong reaction in the urine for acetone, and in most every case a phosphaturia is present, which in a degree shows us that the intestinal tract is unable to eliminate the calcium products that it should, and this work is then thrown onto the kidneys, and as a result we have a condition of phosphaturia present. I cannot help but feel that we are obliged to sooner or later concede that the sympathetic nervous system is at the bottom of this trouble.

With reference to treatment, Dr. Wilkinson's freatment is perfectly all right as far as the observations that we can possibly make, teach us. The fact is that through this acetone poisoning of the blood, the alkalinity is reduced, and the system must have alkalics from a different source, and in this way the bicarbonate of soda given per mouth, and even intravenously or by way of the rectum, is certainly indicated.

Dr. E. V. Brumbaugh, Milwaukee: Mr. President and Gentlemen: The subject of non-diabetic acetonemia is a subject that has been of great interest to me for a long period of time. I have had no experience with the class of cases discussed in the first paper, but some time ago I had occasion to make a series of twelve or thirteen hundred urine examinations of patients before operative conditions. I found in these cases acetone present in three or four instances where the operation was carried on nevertheless, but in making examinations following operation we found the presence of acetone in more than one hundred cases. There was a marked relationship also between the toxic symptoms following operation, as evidenced by the vomiting and sickness, nausea and symptoms in the cases, and in those cases where the vomiting was slight and where the patient made an easy recovery from the anesthetic, acetone was found in a small number of eases. In those cases where the vomiting was present to a very severe extent, the acetonemia was evidenced by the presence of the acetone bodies in the urine, in 75 per cent of the eases, in very marked conditions.

I think these findings will point to the fact corroborating the Van Noorden theory as to the fatty destruction, as we of course know the effect of the anesthetic upon the fats and upon the liver metabolism. None of these cases showed any other evidence than that which I have already spoken of having acidosis. None of the cases resulted fatally, and in consequence no diabetes was possible in any of the cases.

DR. LAYTON, Fond du Lac: I would like to add a word or two inasmuch as this is a subject in which, especially in the last few years, I have taken a great deal of interest. These cases apparently come under the head of disturbed metabolism, whether of fats or proteins must be decided in each individual case.

Relative to the statement made by the essayist in regard to the five children eating at the same table, and only one is attacked, I have frequently observed that myself, but we must remember that of those five children no two will eat alike; each one of those children will eat differently, that is, one child will eat more earbohydrates than the other. So I am quite sure, from my own personal experience and from most of the literature that we have been able to review on these subjects, that these cases are practically always due to some dietetic error. Of course we will also remember that in an infant, protein metabolism especially is one of the most important factors of growth. We must also remember that a child eats more proportionately, than an adult does, and that in these cases it is very easy to get an accumulation of the incomplete products of fat and protein metabolism. So far as the derangement of the internal secretions is concerned, I believe that they play an important factor, but I furthermore believe that the derangement of the internal secretions is primarily due to a deficiency in nutrition, a deficiency in supplying the proper elements that go to make up the perfect metabolism. So that, finally, I am satisfied that practically every one of these cases can be traced to some error in diet, either of omission or commission. The relative tolerance of different children for different articles of food should always be borne in mind,

DR. M. R. WILKINSON, Oconomowoc: Mr. President and Gentlemen: I was in hopes that some light might be thrown upon the causation of this disease by the diseaseion of this paper.

In regard to the perversion of metabolism, which is the cause of the formation of acetone and kindred bodies, we are still in the dark as to the cause of this perversion. With regard to its being a dietetic error, I particularly mention the fact of street "Arabs" whose diet is regulated in no way, and who will eat anything from a banana peel to a piece out of the garbage barrel, and who run the streets constantly, are never attacked.

Another thing: although children eat at the same table, the one child will be attacked at one time, and another child attacked at another time. Now whether

it is due to an error of protein metabolism or whether it is due to an infection, or whether it is due to a disturbance of the carbohydrates of metabolism; what is the primary cause? It is a question which I wish all interested in would bear in mind and try to gain light upon.

One thing was brought out in regard to the anesthetic in cases preparatory to operation, to the effect that acetone is often found, and I wish to emphasize the fact that I believe that 75 per cent of the physicians of the state of Wisconsin do not give sufficient carbohydrates when strictly dieting a patient. We should bear in mind that the so-called beef tea is nothing more or less than a poison. While not poisonous in itself, the fact, that it does not contain the carbohydrates, makes a poison of it if depended upon for nourishment. Starving the system of carbohydrates produces acetonemia, and endangers the life of the patient who is to undergo an operation for acute trouble.

# SOME ACUTE ABDOMINAL EMERGENCIES.\*

BY D. R. CONNELL, M. D.,

SURGEON TO THE BELOIT GENERAL HOSPITAL,

BELOIT,

The name of this paper is self-explanatory, and the responsibility which rests on those to whom the management of these cases are entrusted, is no doubt quite familiar to all.

Probably no class of cases in the life of the general practitioner, consultant, internist, or surgeon, calls for such rare, good judgment as do the acute diseases of the abdomen, which are "Surgical Emergencies in fact."

Practically all the acute diseases of every nature are first seen by the family doctor, and in many instances he becomes judge and jury and court of appeal all in one. On his shoulders rests the early diagnosis and, with it, the treatment of the case, medical or surgical, as it may happen to be. He may be many miles removed from some competent medical colleague, or the attack may not look sufficiently serious to the laity to occasion any expense of consultation, leaving the responsibility of the outcome on him, and on him alone, for the first two or three days until the outlook is determined either by a quick return to normal conditions, or to a stormy peritoncal involvement with great anxiety and apprehension, and the patient is drifted on a

<sup>\*</sup>Read at the 69th annual meeting of the Wisconsin State Medical Society, Milwaukee, Oct. 6-8, 1915.

sea of uncertainty whose harbor beckons its victim often to a sad and cruel fate. There is no intention in my remarks to criticize any man or class of men, because I realize fully the difficulty which surrounds many of these cases which you are called upon to diagnose and treat in your every day practice. My object is to review a few of the common abdominal emergencies and try to point out a way sane and sound, that will help to make the mortality tables of these common diseases something less appalling than the past has witnessed.

Let us review some of the common diseases that fall to the general practitioner, young and old, city or country. Seasons of the year make no change. These diseases never go on a vacation, but, like the poor, we have them always with us. We will begin with the well known and threadworn subject, Appendicitis. Look at the records of any modern hospital and you will see a death rate of 1 in 10, which is 10 per cent, not from the surgical operation but from death due to some man's procrastination, cases treated on the expectant plan until too late for surgical aid.

"Given a mild attack of appendicitis, which starts at night with coliky pains in the abdomen, nausea, and possibly vomiting, a slight elevation of temperature, leukocytosis and local sensitiveness in the right flank, all in the first six, eight, or ten hours of the attack. By next morning the pain and temperature may be gone entirely. What has happened! Is any one here today wise enough to tell? Is the patient recovering or is he headed straight for the grave? If the appendix has undergone complete gangrene, it ceases to be painful, because its nerves are dead. It produces no elevation of temperature or leukocytosis because absorption of the products of infection are not possible through a dead mucosa. (Murphy.)"

The appendix dead, like a patient dead, has no pain and no power of absorption. This is really the case, amply proven by the experience of us all. Then where is the remedy? Advise an operation on every case of acute appendicitis, not today, not tomorrow, or some other day, but now. Stand firmly by your statistics and your conscience and operate the case at once. If the case happens to be a child, bear in mind that the death rate is about three times higher than in the adult, if left on this so-called expectant treatment, which is really no treatment at all.

The next one of the acute abdominal emergencies is a very important disease indeed because it occurs in young people generally between the ages of 18 and 45. No family distinction is recognized in its ravages, it attacks its victim without any possible warning and leaves sadness and bitterness often in its wake. We refer, as you probably have already supposed, to a ruptured extra-uterine pregnancy, a complication not very uncommon, and if there is any one within the reach of my voice today who has not seen a case, let him bear with me on the following symptoms and history, and before he is home many months he will no doubt recognize one, pursue the proper treatment, and save a human life. What are the symptoms? Given a woman, with usually a history of spells of pain in her abdomen from early childhood, she comes to the office saying she does not know just what is wrong. The history suggests a pregnancy but the objective signs are vague, if not entirely wanting. She has leaking of blood from the vagina, something of a morning sickness, and generally pain in the abdomen. You will be called suddenly to the bedside of this woman after she has been seized with sudden and severe pain with some hemorrhage from the vagina, and you wait for the second symptom in the history—which is collapse. Now this case looks clear and yet it is rarely diagnosed rightly. It is either called a miscarriage or an acute attack of appendicitis. If called the latter and the operation done, all is well. If not, you will treat her on the expectant plan which according to Murphy is the "expectans mortem"—expecting death. What should you do with one of these cases? The first thing is to get the history, and second to realize the mortality of the untreated The surgical treatment, if done early by competent well-equipped surgeons, has praetically no death rate and this, I think, will agree with the experience of the surgeons before me today. What is the death rate of the untreated case?- Something like 24 per cent, and anybody who wishes to face this responsibility must bear in mind that one of the four young women and possibly mothers whose place in society and over a family cannot easily be filled, will be quickly wiped away.

Another common disease of the abdomen, which at least is common in its chronic form, has to do with ulceration of the stomach or the bowel. A disease that is not very rare, even in the acute form, and this is the form that is of particular interest to the general practitioner on account of the mortality attending the complications of these diseases. Ulcers of the stomach and duodenum

are about equal in frequency, with the majority in favor of the duodenal variety. Out of one thousand cases, analyzed by Mayo, 57 per cent were in the duodenum and 43 per cent in the stomach, and when you again consider that over 80 per cent of the stomach ulcers are in the pyloric half, and 40 per cent of these at the pyloric opening itself, you can readily see that the battle ground covers only a small area. These diseases in the acute form will interest you on account of one of two complications, namely, hemorrhage or perforation, and both of these emergencies call for treatment with the very best judgment, although both complications do not often occur at the same time nor in the same case. You will find, however, that one of them will be sufficient to keep you interested until your patient has passed the danger zone.

Let us stop for a moment and look into the subject of gastric hemorrhage. You know, at least the young men know, that the blood supply of the stomach comes from the coeliac axis, which divides into the gastric, hepatic, and splenic, and one of the branches of this axis is the cause of the hemorrhage, and the amount of bleeding and suddenness of the onset is probably familiar to most of you, if not to all. Having one of these cases before you surrounded by the anxious relatives, what will you say to them in regard to the prognosis and treatment of the case? You can tell them that probably 96 per cent of all bleeding ulcers heal under medical treatment, or no treatment with the exception of ice to the abdomen, rest, etc., etc. Consequently, only 4 per cent lose their lives from this complication. This of course puts this class of cases at once on the medical treatment, because no surgical procedure could lower this mortality. If the bleeding artery, which is generally the splenic, could be isolated and tied, the surgical treatment would be ideal. But this is out of the question, on account of the mortality of the latter, whereas there is safety on the other line or expectant treatment.

The other acute complication will be a rupture of a duodenal or gastric ulcer, which is a calamity that calls for a diagnosis early and prompt surgical aid. Not alone is it always a surgical condition, but it calls for a high grade of surgery early and no incompetent operator need ever expect results here because chance plays very little part in the results of these cases. The symptoms are pretty characteristic of some serious, dangerous abdominal explo-

sion, such as pain, rigidity, etc., etc., together with the history of a previous ulcer.

Upon opening the abdomen, if a ruptured gastric ulcer is present, one will quickly see the contents of the stomach in the peritoneal cavity, and if a duodenal ulcer has ruptured, one will see the free bile in the abdomen. This will quickly lead one to the pathology. These conditions, while by no means easy to diagnose before operation, still reveal the necessity for some abdominal work. According to Moynihan of Leeds, 25 per cent of all perforating duodenal ulcers are operated upon under the mistaken diagnosis of appendicitis, and are explained by the fact that the escaping fluid passes down along the water shed, over the mesocolon along the outside of the ascending colon to the cecal region, making the mistake easy, but happily of no great consequence to the abdominal surgeon. The operation for perforating gastric and duodenal ulcer needs no description here. It is a part of the life of the surgeon, only I wish to emphasize and emphasize strongly this one point, that drainage of the abdomen and only drainage will not save the patient's life, as it does in many neglected cases of appendicitis. The opening in the duodenum or stomach must be closed and closed early and securely, and if necessary, other provisions made for carrying the contents of the stomach in some other direction. The mortality of this early surgical operation is probably something like ten to fifteen per ccut, and with other treatment, nearly one hundred per cent.

The next class of cases which is attracting considerable attention throughout the medical work, deals with the disease of that well known and often spoken of but seldom seen organ, the pancreas.

"As you know, the pancreas is the great abdominal salivary gland, and lies in a protected position, no other organ in the human body with such a valuable function is so little liable to intrinsic disease. In its natural defenses against sickness, it has but one single defect, and that is the mechanical association of the pancreatic duct with the common duct of the liver. It is this unfortunate association of terminal facilities that the large percentage of diseases of the pancreas have their origin." (Mayo.)

If it were not for the duct of Santorini, which has an independent opening into the duodenum, the diseases of the pancreas would be more common and fatal.

There is no doubt but that the infection travels

up the common duct to the gall bladder, where there is a possibility of large accumulation of infected bile, which on its way down is diverted into the duct of Wirsung, especially if there is any obstruction to the return flow of the bile in the common duct. Practically all patients with pancreatic disease have an involvement of the biliary tract.

What are the symptoms of an acute inflammation of the pancreas? They are the same as any violent inflammation in the abdomen; such as sudden onset, agonizing pain in the upper abdomen, collapse followed by prostration, quick pulse, slight elevation of temperature, nausea, and vomiting, and rapid abdominal distention. The acuteness of symptoms suggests obstruction of the bowel, which is belied, by the ability to secure the passage of gas.

"In the very acute cases, hemorrhagic pancreatitis may result and destroy the pancreas in a few hours. The most interesting feature of this stormy disease concerns fat necrosis, a desseminated necrosis of fat due to the escape of the pancreatic ferments, which involve to a greater or lesser extent the omentum, mesentery, retro-peritoneal and other adipose tissue. Suppression of the urine accompanied by delirium, and a semi-comatose condition due to the effect on the envelopes of the kidney of this fat splitting ferment." (Mayo.)

This disease is surgical, always surgical, and always early surgical, again the expectant treatment is the "expectans mortem," expecting death, and it comes, and it comes quickly.

And now, my dear doctors, this effort for want of time must close, grateful indeed for your kind attention and for the courtesy extended. We wish to pay our humble tribute to the many honest hard working men who have paved the way for the clear understanding of the principles that govern all abdominal work, and remember with full appreciation the great men that have passed the scene of action while we have been before the medical world, Senn, Fenger, Billroth, Robinson, Sands, McDowell, Richardson, and McGuire, known wherever surgery is known, and a bright and encouraging example of the recent past.

While with us, with still brighter luster do we see Murphy, Ochsner, Kocher, Mayo, Carrel, and Crile. Let us hope the work we are doing will be toward further advancement, and that surgery of the abdomen and indeed surgery of every specialty

will be illumined by the age in which we have the privilege to practice this wonderful chosen art.

#### DISCUSSION.

Dr. L. F. JERMAIN, Milwaukee: The acute abdominal conditions discussed by the essayist, with the possible exception of hemorrhage from the stomach, are no longer considered medical, or even border-line affections, but are distinctly and solely surgical; and no treatment except prompt surgical treatment is warranted in any one of them. Fortunately this conviction is becoming the general one, not only among the medical profession, but is gradually permeating the minds of the laity. So it is increasingly less difficult for the general practitioner or the surgeon to convince patients suffering from these acute abdominal conditions, of the necessity of prompt surgical intervention, if only the physician himself is certain of his diagnosis, and is firm in his insistence upon surgical treatment. It is my conviction, and I have acted accordingly for many years, that no physician has a right to prescribe morphin, or any other palliative for that matter, to any of these patients suffering from acute abdominal conditions before he has obtained the consent to surgical interference. I have even seen patients who were unquestionably suffering from general peritonitis, the result of appendicitis, or perforated ulcer, or from other acute abdominal conditicn, in which the symptoms were so obscured by the administration of morphin that it was practically impossible to convince that patient or his family that surgical intervention was necessary. I am certain that a positive insistence upon surgical interference is convincing to the large majority of patients, especially if the refusal to treat these patients in any other way except by surgical means comes from a general practitioner or an internist. I have often been called in by surgeons in this city simply to convince the family and the patient that there was no medical treatment for these conditions, and my absolute refusal to have anything to do with these cases convinced the family and the patient that the only thing was surgical treatment, and it was accepted. As I say, the question of treatment is settled, but not the question of diagnosis, and there is where the difficulty comes in. I do not believe that there are many men in the medical profession today who, if they are convinced that they are dealing with an acute abdominal condition, will hesitate to advise, and to insist upon surgical interference; but there still are many men who, in the face of acute abdominal pain, and in the face of abdominal tenderness and muscular rigidity, vomiting and constipation, will think of acute gastritis, or acute enteritis, or of a gastric colic, or intestinal colic, or ptomaine poisoning, and who fail to realize that purgation will kill without fail, and who do not realize that they are not dealing with a condition inside of the gastro-intestinal tract, but with one of peritoneal irritation—peritoneal infection. The diagnosis of these conditions is easy, if we but, for the time being, forget that there is such a thing as acute gastritis, intestinal colic, gastric colic, or gastro-enteritis, and consider all these cases with acute symptoms of trouble in the abdomen, as peritoneal infection.

DR. J. P. CONNELL, Fond du Lac: Mr. President and Members of the State Medical Society: The essayist and those who discussed this subject before me have quite fully covered the ground, but since the mortality from acute abdominal diseases is still considerable, it may be well for me to emphasize a few of the important teatures. Abdominal pain, like pain elsewhere, is a warning to the individual and to the physician, that there is impending trouble, and the location of the pain tells the physician of its significance,-whether it is urgent, or whether he can afford to procrastinate. Pain is to the physician what the danger signals are to the engineer, and the pilot lights are to the captain. He who procrastinates in abdominal work, suffers the same disasters as the captain who shuts his eyes and runs without observing the signals. Injections of morphin or other narcotics lull the patient into a false idea of security, and should only be administered when the diagnosis is made, and the treatment outlined. When a patient complains of abdominal pain, the most searching examination should be made as to its occasion. Abdominal diseases with acute pain we line up in about the following order: appendicitis, biliary trouble, actopic, gestation, ulcer of the stomach, pancreatitis and embolism of the mesenteric artery. This last was not spoken of by the essayist.

If you will remember that your anatomy teaches that the small intestine is entirely supplied by the superior mesenteric artery, which is also an end artery, and a large artery coming off just below the celiac axis, and any trouble getting in there is a serious trouble. I will cite a series of five cases which I observed, two of which recovered, and three died, a mortality of 60 per cent. I wish to state that the mortalities did not occur as a result of the operation but as a result of the refusal of the physician or the patient to recognize the danger signal—pain. An embolism coming in the mesenteric artery, unless it involves over ten or twelve feet of the small intestine, is practically a safe and easy operation, and can be accomplished in reasonably short time.

Case 1. A woman 45 years old, taken with severe abdominal pain, vomiting, rapid pulse, low temperature. Operation advised and accepted. Abdomen opened. Six feet of small intestine removed. Lateral anastomosis. Good recovery.

Second patient. 60 years old, sick five days. Very painful. Operation. Five feet of intestine removed. Patient succumbed the next day.

Case 3. Sick three days. Intense abdominal pain, vomiting intestinal obstruction. No fever. Operation advised and accepted. Removed 12 inches of the ileum. Side to side anastomosis. Good recovery.

Case 4. Patient sick three days. Intense pain in the region of the stomach. (Now this is peculiar, that very many times with this calamity the pain is in the stomach rather than at the seat of the obstruction.) Bowel obstruction. Operation advised and rejected. Twenty-four hours later, operation was accepted. Patient was then practically moribund. Two feet of the ileum re-

moved. Side to side anastomosis. Patient succumbed three hours later.

Case 5, which occurred a few weeks ago. Patient was in extremis. Abdomen was opened. Five feet of the ileum removed. Patient died three hours later.

All these patients had severe abdominal pain. Had the danger signal of pain been observed, and these patients advised as they should have been, that an operation was imperative, there should have been 100 per cent of recoveries, instead of 40 per cent mortality. It is not necessary that the physician make a complete diagnosis. All the signal lights were on. Operation was imperative. Procrastination was fatal. Early operation would receive its own reward, and the mortality per cent would have been reduced from 40 to nothing.

One case more I would wish to emphasize, in view of the paper just read. Four years ago I was called in consultation to see a woman who had a terrific hemorrhage from the stomach, I think to the extent of at least a gallon. She was very exsanguinated. I advised a palliative treatment, which she accepted. Day before yesterday she came to operation for a large abdominal cyst. I removed the cyst, and, through curiosity, I thought I would see what the gastric ulcer had been doing. With the most careful examination we were unable to find any evidence of a gastric ulcer, whether it was inside of the stomach or not; but from the outside examination it was not visible. I thought I would say this for the benefit of the internist. They are claiming a large percentage of cures through medical treatment, and this case would go to corroborate that report.

Dr. D. J. Hayes, Milwaukee: I should like to say a few words on Dr. Connell's paper, because I think it is a very valuable one. I do not think that there is any subject of abdominal work today that is more important than the discussion of the points brought up by Dr. Connell.

I recognize the fact that with the man practicing in a distant part of the country, who is called to a case of this kind, there is a tendency to hesitate and try remedies for a time: and then, if he concludes that an operation is necessary in gastric ulcer, it is generally necessary to go some distance in order to get a man absorlutely competent to perform that operation. Discussion goes on and on in the family, and the physician probably has not backbone sufficient to stand up firmly, as hemust do. And if this paper can bring out just one point, that is, when you decide that is a case for thesurgeon, then stand firmly, and refuse to give morphinor any other narcotic, and insist that some competent. surgeon must be gotten at once. The whole thing simmers down to that point. There is where we are all! weak in the medical profession, and it requires backbone. to tell a family that a man or woman must be sent to. some distant part immediately to a surgeon, when thepatient does not seem very sick. They usually say, the patient is not very bad, we will wait until tomorrow and see how he is getting along then. It requires backbone and accurate diagnostic powers. I remember of two cases during the last year that I had with Dr. J. J. Fitzgerald. of Eagle. In one case the family procrastinated, the patient was let go a day or two; operation was recommended, but they kept procrastinating. When the abdomen was opened it was full, and the patient died. The gastric ulcer was closed, and the patient died the same day. Three months after, Dr. Fitzgerald had another case. At this time he stood firmly and recommended immediate operation. In the evening the patient was taken with the pains that occur in gastric ulcer, and we operated the next morning. We were more fortunate. There was a slight perforation of the stemach, albuminous substance, and a slight amount of exudation. The operation was made in the usual manner, and the patient recovered, showing that the determination and backbone of the physician in this case saved the patient's life.

DR. W. E. GROUND, Superior: The points in this paper are very well taken, but I should like to emphasize one or two phases of the subject that have been but slightly touched upon. All of you who have had experience in abdominal surgery see the dreadful mistake made by a great many practitioners in giving physics. Emphasis has been laid upon giving morphin. Morphin is at least human, but physic as a universal thing is inhuman, and is just as badly misplaced as is morphin. I do not pretend to say that the giving of morphin is advisable, but I do say this, that the giving of physic in every case of abdominal trouble you come across is worse practice than the giving of morphin. There is not a condition in these abdominal emergencies where a physic is indicated, and yet it is the almost universal practice for people, and for a great many physicians, to give a cathartic the minute they are called to sec some acute abdominal condition, without waiting to see what the condition really is. The physic is first given, and the diagnosis often made afterwards. We all know that in the case of a perforated gastric ulcer, or duodenal ulcer, or acute appendicitis, or any of these conditions that are essentially surgical, the giving of a physic is about the worst thing you can do. Deaver and Corning and Murphy have made the statement that they never saw a case of acute perforated appendicitis that had not been physicked. That may be a broad statement, but we do know that the giving of physics is certainly a mistake.

Dr. D. R. Connell, Beloit: I wish to thank you very kindly, Mr. President, for displacing someone else to give me a place on the program this morning. I certainly appreciate it.

I want to say a few words in closing, not on my paper, but on the discussion of my paper. I certainly feel the illumination of the men that discussed the paper. The first one, the Dean of Marquette University, a boyhood, barefoot friend of mine, raised in the same neighborhood, who seemed to thrive and grow big and do well; the second one, my brother, and the third one, a gentleman who pulled teeth for me when I was a boy, and did it pretty painfully at that, no twilight sleep about it, the noblest Roman of them all, Dr. D. J. Hayes, of Milwaukee,

# FOCAL INFECTIONS AND THEIR RELATION TO DIABETES.\*

BY H. P. GREELEY.

#### WAUKESHA.

The extraordinary impetus given to medicine by the original researches of Pasteur and the subsequent development of the science of Bacteriology have caused most of the general infections to give up their secrets. The unrelenting ardor of the young scientist makes him continually seek new worlds to conquer. Border line diseases and disseases in which, clinically, no suspicion of infection has ever rested, are being subjected to piercing investigation with the latest scientific methods of the bacteriologist.

The chronic diseases especially are receiving the attention of the medical world. All the newer methods of investigation developed in the past fifty years in all branches of the medical sciences are being applied to the study of the chronic diseases, which have always comprised the least understood and consequently the most discouraging field in medicine. Now every month almost makes some real advance in our knowledge of these diseases.

Every new enthusiasm, however, overshoots itself and there are always fanatics and their fads, whose whirl-pools should not divert us from the main channel of progress.

It is only necessary to mention some of the fads to recognize their absurdity. At one time autointoxication was regarded by many as the cause of most of the chronic diseases, including the anemias, arteriosclerosis, rheumatism, nervous prostration, and a host of others.

Only recently many varieties of visceroptosis have been the cause of most disturbances of the alimentary canal and sympathetic nervous system. Some men have even gone so far as to reason that man's greatest mistake was made when he began to walk on two legs instead of continuing to walk on four.

Then there are people who attribute every obscure disturbance of physiology to some polyglandular syndrome and feed glandular extracts accordingly.

Perhaps the latest enthusiasm in medicine is that of focal infections. Already in the literature of

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the past year you will see cases of epilepsy, dementia praecox, migraine, melancholia, nervous prostration, pernicious anemia, diabetes, nephritis, exophthalmic goitre, Parkinson's disease, arteriosclerosis, hypertension, sciatica, leukaemia, and many others, reported as due to focal infections. Many of them sound too absurd to mention, but they are all disorders of obscure origin and none of them is inconceivably not due to a chronic toxemia. Some of them have certainly such an origin, but few of them are susceptible of scientific demonstration as yet. With many people, the subject, particularly in its relation to systemic diseases, has become a fad, and in some instances the investigation resembles that old definition of a metaphysician, "A blind man in a dark room looking for a black cat which isn't there." So it is with every new bit of real knowledge, sky rockets of enthusiasm burst forth only to fade away in the subsequent light of truth.

In regard to the immediate subject of the relationship of focal infections to diabetes, most internists would dismiss the question with a word and say that they were mere coincidences, but I feel that medicine is too full of surprises to dismiss any subject so summarily, particularly when it has to do with a chronic disease of unknown etiology. Let us therefore examine the subject as carefully as possible from as many angles as possible. Clinically, what is the relationship between focal infection and diabetes? Dr. Hodgson's records of the last two and a half years, which he has so kindly put at my disposal, together with my own make, a total of 614 careful case records, which I have been able to review.

In general, the usual distinct types are observed. In these types we are able to determine the exciting causes, but we must generally assume an underlying predisposition. Two hundred and one cases were associated with obesity of a marked degree. This is a class of individuals who vary from a minimum of 5 feet 6 inches in height and weigh 200 pounds, to a maximum of 6 feet in height and weigh 300 pounds. There is a further group of 52 cases in whom obesity was less marked, but who combined gross excesses in eating with a markedly sedentary life. This group fell largely in the third to the sixth decades of life, was as a rule mild in type and showed little or no acidosis or tendency to progression. Loss of weight and polyuria are almost constant initial symptoms, the loss averaging 40 to 50 pounds. Heredity played little or no part, nor did infection in this group.

To me, this type of case can be explained on a mathematical basis. Starting with a normal weight of 150 to 190 pounds, an individual has a pancreas whose functional capacity was 4/4 or normal. Excesses in eating and in weight put a strain upon the pancreas which it was not equal to, and consequently the metabolism broke down. The polyuria and loss of weight in the initial stage of the disease again reduced the metabolism by reducing the weight, and the pancreas, which was too small for 200 to 260 pounds, is again almost adequate to 150 or 190 pounds. These cases are then mild and not progressive unless the patient continues in gross excesses of diet.

Take almost any case of diabetes and the same is true. An initial loss of weight followed by proper treatment converts the disease from the severe to moderately severe or from the moderately severe to mild type. Therefore, never try to have your diabetics gain much weight if they are not greatly underweight.

Among the remaining cases, 52 were directly associated with great physical and nervous shock, such as trauma or great fright. This type of case occurs in younger people, is generally severe in type, progressive, and associated with marked acidosis.

Twenty-nine cases were associated with severe arteriosclerosis, twenty with very positive heredity, nine with gall stones, six with exophthalmic goitre, six with prolonged chloroform anaesthesia. In 98, circumstances of origin could not be determined; 26 cases were associated with, or closely followed, some acute infection, such as colitis, pneumonia, tonsillitis, appendicitis, rheumatism, catarrhal jaundice, small-pox, malaria, or typhoid. Sugar was discovered after the infection and no examination of the urine had been made previously, but, in view of the generally rapidly fatal nature of severe infections in diabetes, the probability of its pre-existence was remote.

There were 112 cases associated with bad pyorrhea or bad crown work in which apical abscesses were proved by the presence of sinuses or by X-ray. The infection was not always the sole pathological condition present. Practically all cases exhibited a pathological nervous system, but this is common ground to almost all diabetics.

Did these cases with pyorrhea react differently from the other groups? They showed no con-

stancy of character, some being severe and some mild. Diet seemed to accomplish as much as in other cases. They were made sugar-free as readily and remained sugar-free as long. Extraction of teeth seemed to have no unusual results.

We, by no means, claim that every case of pyorrhea or abscessed teeth was noticed, but the incidence of pyorrhea among our cases does not seem to be greater than in any general hospital clinic, in spite of the accepted fact that all diabetics are more prone to infection than almost any other group of cases. In Newfoundland, where pyorrhea and dental caries were present in 90 per cent of people, diabetes is practically unknown. Other types of focal infection, such as chronic tonsillitis, prostatitis and vesiculitis, and chronic infection in the accessory sinuses of the respiratory tract, are certainly not more frequent than in other diseases, and statistics are lacking in these infections so that no clinical data are valuable.

Focal infections are so extraordinarily eommon that, if these were responsible for the diabetic condition, diabetes would be vastly more frequent, and if we admit, as we must, that there is any underlying predisposition to diabetes, why then the focal infection takes rank as one of the least important exciting conditions or merely as a complication contributing to the patient's discomfort and lowered resistance. It has been suggested that this lowered resistance is due to a chronic infection which produces increased susceptibility rather than immunity, but the greatest susceptibility seems to be in those cases of young individuals, where it is easiest to rule out the presence of infection as a Recognizing the untrustworthiness complication. of clinical data, we should go farther and determine if possible what other evidence there is for the correctness of the insular hypothesis, namely, that diabetes results from alterations in the function of the islands of Langerhans. This hypothesis is the most plausible and popular one today.

Histologically, you will remember that the islets resemble in vascularity the glomeruli of the kidney. Instead of possessing one afferent and efferent vessel, however, there are several capillaries and very free anastomoses. The nature of its structure then, exposes it to any toxic agent in the blood. The latest pathological statistics are those of Weiehselbaumm. Opie has previously reported hyaline changes as most frequent after 40 years of age.

According to Weichselbaum, 90 per cent of cases show lesions of the islets in varying degrees. It is

apparently unnecessary to find all islets degenerated any more than all glomeruli in nephritis. Fifty-three per cent of Weichselbaumm's studied cases showed hydropic degeneration of islets-28 per cent hyaline degeneration and 43 per cent chronic intraacinal or periacinal inflammation or sclerosis with subsequent atrophy. The hydropic degeneration occurred in younger individuals and the atrophy and hyaline degeneration in older individuals. In only a few cases was there polynuclear infiltration evidencing acute inflammatory reaction. Mallory has studied all his cases for the presence of bacteria, with negative results. The clinical pathology of hyaline material is not understood. It may or may not result from a chronic inflammatory reaction. The hydropic degeneration described by Weichselbaumm corresponds almost exactly to the pathological changes observed in experimental animals in which nine-tenths of the pancreas has been removed, and which is described by both Allen and Homans. This is certainly to be regarded as negative evidence as regards any infectious theory of the disease. In fact all the evidence is largely contradictory, as most authorities agree that the pathological changes seen are the results and not the cause of diabetes. Further than this, as Allen concludes, any anatomical theory of diabetes must be bolstered up by the supposition of functional cases, and whatever the cause, there arc a great many influences to which the diabetic economy is hypersusceptible. Focal infections are among these, and should be removed wherever such procedures are feasible.

There are a great many exciting eauses of diabetes all of which presuppose an underlying predisposition. Many explanations of this have been made. One is based on the anatomical study of the pancreas which shows a great variation in the size and number of the islands. In order to explain a predisposition, we have only to suppose that certain people are born with too few and too small islands—a thing impossible to prove but plausible at least. However, there are lines of physiological research which, I believe, promise to contribute a great deal to our knowledge of diabetes. You are all acquainted with the physiological researches of Dr. W. B. Cannon. In this connection he has shown that about 16 per cent of normal people may develop glucosuria under the stress of great emotion. By very unique methods of work he has demonstrated the effects of the

major emotions on bodily states, which result in the discharge of adrenin into the blood, and the sudden mobilization of one's glycogen reserves intended for action. This may, under certain conditions, produce temporary glucosuria. He has also demonstrated that small irritant stimuli over a long period of time may result in a profound alteration in metabolism and in internal secretions. It is always gratifying when the scientist and the clinician bear each other out. It is reasonable to suppose that a stimulus which causes temporary glucosuria in a normal subject, could cause permanent glucosuria or diabetes in one predisposed, and this may soon be demonstrated experimentally. In the evolution of man, society changes more rapidly than physical characteristics. His physical being is not yet adapted to his social environment. Among other things, it is not natural for him to subject himself to great emotional activity without compensatory physical activity, but modern life does just that. We are ever increasing our desires for excitement and sensation and society has destroyed many channels of expression of physical activity. Potentially, we are as strong as ever but kinetically weaker and weaker.

The consequent repression of the outgo of energy with an increase often in emotional excitement, may well lay the foundations of many disturbances of metabolism in the disharmony between the central and autinomic nervous systems. This foundation is more easily laid in impressionable childhood than in maturity.

The ever increasing mad desire for crazy excitement evidenced by the American youth, a good example of which is in the melodramatic "movies," is a source of the greatest harm in causing disorders of the nervous system and of metabolism. This is a subject which is most fertile and will vastly increase our knowledge of pathologic physiology.

#### DISCUSSION.

Dr. F. C. Christensen, Racine: Mr. President and Members of the Medical Fraternity: It is a hard position to place me in, as a general practitioner, to discuss such a paper, and I shall not attempt to do so. I simply desire to call attention to one thing, and that is, as a general practitioner along general lines. We are all inclined to look for big things, and we want to do big things, and we have opportunities more or less to do big things, but when we speak about focal infection in

its relation to diabetes, there is one point that will naturally come to our attention, and that is local infection, and that is what I wish briefly to touch upon. We know that when we get an infection in a normal individual, or in an individual of ordinary health, the result of that infection depends upon two factors; first, the virulence of the attacking micro-organism, and second, the resistance of the individual. Now then we have a diabetic case, we have a condition which enhances the growth of the micro-organism; on the other hand, we have a weakened condition of that individual, even to adenemia. We know that when we have these infections, there is much less reaction than is present in the ordinary individual, and also less pain; the patient does not make complaint, and the doctor often overlooks it. It takes but a match to start a fire which will destroy a big building, and it takes only a small infection to destroy the life of a diabetic individual, and this could be easily overcome if we get at it early and treat it properly. Not only must we use the general dietetic and hygienic treatment, which are absolutely necessary, but if we neglect the proper local treatment, the result will often prove disastrous to the patient.

Dr. L. M. Warfield, Milwaukee: Mr. President and Members of the Society: I was most agreeably surprised in listening to Dr. Greeley's paper, because I thought from the title of the paper, "Focal Infections and Their Relation to Diabetes," that he belonged to the group of men who, today, are grasping at all the new ideas in order to explain every possible disease. So it was with a feeling of great relief that I listened to his paper.

The points which Dr. Greeley makes, it seems to me, are, so far as our knowledge is concerned at present, perfectly correct. We cannot say they are correct, because what we think we know today, tomorrow we may find was absolutely incorrect. But the work of Allen, the recent work of Homans, Major, and others, all seem to show that hyalin degeneration of the Islands of Langerhans is not, as the text books have incorporated, the constant pathological lesion of diabetes; but it would seem that there is some functional change in the Islands of Langerhaus. The so-called hydropic degencration is the result of over-timulation of the cells and is found in diabetes. As Dr. Greeley very rightly says, experimentally and without any focal infection at all, this may be produced. If this is the case, then it does not seem to me that focal infection, as such, can be said to be a cause of diabetes, but rather that in diabetes infections are much more apt to make their appearance.

Dr. L. F. Barker, Baltimore: Mr. President and Gentlemen: I am glad to have the opportunity to say a word in discussion of this paper of Dr. Greeley. It seems to me that he has taken the middle way as regards the relation of these focal infections to diabetes. He points out that they are not in themselves wholly responsible for the disease, but he does not underestimate the significance of focal infections in diabetes mellitus. When focal infections exist in association with the dis-

case, it is certainly very desirable to get rid of them, because anything that depresses the general powers of the body in diabetes, should be gotten rid of.

He has pointed out one thing which we should all keep in mind, namely, that diabetes is an expression of insufficiency of function of the internal secretion of the pancreas; that insufficiency of function can be brought about in very many different ways, starting from various parts of the body. We used to hear of nervous diabetes, adrenal diabetes, hepatic diabetes, thyroid diabetes, and pancreatic diabetes. It may be that in the end they are all instances of pancreatic diabetes, through the intervention of other primary diabetogenous organs. Certainly the evidence at present is in favor of the view that diabetes mellitus is as much an expression of internal insufficiency of the pancreas as tetany is an expression of insufficiency of the parathyroid glands.

The essayist has referred to Allen's work. I believe that it is of great practical importance in the treatment of the disease, and that every practitioner ought to read the articles by Allen in the Boston Medical and Surgical Journal and in the Journal of the American Medical Association. We can save a great deal of time in getting our patient sugar free, in decreasing the acidosis, and in overcoming the complications of diabetes, if we will follow Allen's method. The method has not been used long enough as yet for us to be sure of ultimate results, but a number of men have used it in quite a large number of cases, and the results are so strikingly beneficial that I feel that it is worthy of a special trial. We used to be very much afraid of suddenly starving our diabetic patients, but Allen has removed that fear. He has shown that by suddenly starving a patient, and taking away all food and giving plenty of water, in three, four or five days, sometimes a little longer, the patient will become absolutely sugar free. This is true even in the most severe cases. Allen has never had a patient that required starvation longer than eight days to become sugar free. I have tried Allen's method in a number of cases, and have always been able to get the patient sugar free in a very few days. Hitherto we were so much afraid of acid intoxication or of coma, from sudden starvation, that we did not dare attempt it, but the evidence now is that there is less danger of coma by this sudden starvation in diabetes than if we feed carbohydrates. The acidosis of diabetes is somewhat different from the ordinary acidosis of starvation, and if a little sodium bicarbonate be given for the first few days, it can be stopped; and the remarkable thing is, that the diabetic acidosis decreases and disappears under the starvation treatment, followed by very cautious feeding.

No single diet can be laid down to be used in all cases of diabetes, and it is desirable that no single diet should be laid down. Each case should be studied for itself.

The relation of the emotions to diabetes has been well expressed by Dr. Greeley. His paper is one that we will all want to read at our leisure, and I hope that I for one may have a reprint of it when it is published.

# THE WORK OF ROBERT BARANY

ON THE SEMICIRCULAR APPARATUS OF THE EAR AND THE CEREBELLAR LOCALIZATION AS THE DIAGNOSTIC KEY TO THE DIFFERENT INTRACRANIAL CONDITIONS.\*

BY FRANZ PFISTER, M. D., F. A. C. S.,

PROFESSOR AND HEAD OF THE DEPARTMENT OF EAR, NOSE
AND THROAT OF THE MARQUETTE UNIVERSITY MEDICAL
SCHOOL, MILWAUKEE.

#### MILWAUKEE.

Robert Barany of Vienna has only lately received the Nobel Prize in Medicine for the year 1914, for work on the static apparatus of the inner ear and cerebellar localization. He was for many vears assistant in the celebrated Politzer Ear Clinic of Vienna, and afterwards in the same capacity with Prof. Urbantschitch. He was made Privat Docent, and shortly before the war was appointed Professor Extraordinarius. Like all European medical teachers, he has never received much of a salary. He has had some private practice, and he has given special postgraduate courses of instruction to American physicians, perhaps not as regularly as his associates, for the reason that he is more an investigator and research man than a teacher. Those that associate with him for any length of time know the value of the great man.

He was just beginning to round up his immense work when the war began, and he was called to the colors, and was one of those captured in the fortress of Premysl, which surrendered to the Russians last March.

According to reports Prof. Barany had to suffer terrible hardships as a prisoner of war, among others the loss of one leg, which was frozen and had to be amputated. He was first in Siberia and afterwards was employed as physician in a war hospital at Kerw, Trans-Caucasus, where he is still supposed to be. His wife, in the meantime, has collected all his papers and publications and forwarded them to the Nobel Prize Commission at their request, and Prof. Barany was awarded the prize and the 147,000 Kronen that go with it, without knowing it until quite recently.

In summing up and describing his work, I can only give a brief account, considering the complex

<sup>\*</sup>Paper read before the Milwaukee Medical Society, Dec. 14, 1915.

nature of the subject, and some of my statements must necessarily be of a schematic character. The whole subject hinges upon the fact that the semicircular canals, which form the organs of the equilibrium and of the muscular sense through their nerve association with the cerebellum, the spine, the stomach, and the eves, act as an alarm apparatus for conditions either in the ear, in the cranium or the body. The signals consist of involuntary, parallel movements of the eye-balls, called nystagmus, so that if any disturbance around this nerve association occurs, we are supposed to recognize and interpret it. In other words, that part of the inner ear which consists of the semicircular canals will, when stimulated, or the opposite, when paralyzed, show the effect by movements of the eyes and disturbances in the equilibrium or by nausea, or even vomiting. The nystagmus in question is the otitic or vestibular nystagmus, which is quite distinct from other forms of nystagmus. We have an ophthalmic nystagmus, due to eye strain, which is mostly horizontal, with a coarse stroke and with no fixed direction. We have the neurotic type of nystagmus in neurasthenia and hysteria, which is also mostly horizontal, but even and undulating, and without a jerk, going alternately in both directions. This otitic or vestibular type is altogether characteristic. Its direction is one-sided. It consists of two movements, a slow one, hardly perceptible to the observer, to one side, and a short, quick one in the opposite direction, which is simply an effort to bring back the eyes from the divergent position. The first slow one is reflex in nature and comes from the semi-circular canals, the vestibular apparatus, as we call it. The second or correcting one, is of a central origin. As long as the stimulus in the vestibular apparatus continues, there will be present this rhythmic motion of the eyes. The vestibular or otitic nystagmus is horizontal with a slight rotation of the

The direction of the nystagmus is named after the direction of the *short* movement. This otitic nystagmus follows fixed laws. It appears either spontaneously, and then it is pathological; or it can be induced physiologically. This last kind we make use of in our various tests. The first is always a sign of diseased conditions, either in the labyrinth or the cerebellum, or the nerve connecting the two, or anywhere in the posterior part of the cranial cavity. If this pathological irritation is not

strong enough to produce a visible spontaneous nystagmus, we still may elicit it by holding the finger about one foot and a half in front of the patient's eye and moving it in front of the face in both directions laterally, the patient's eye following the finger. The nystagmus is always strongest if the patient looks towards the side of its direction.

The tests with nystagmus are for the differential diagnosis of conditions in the ear, in the nerves, or intracranial condition. Wanner has found the turning of a patient in the long axis will produce a horizontal nystagmus to the opposite side of the turning direction. This nystagmus is caused by the irritation in the semicircular canals through the flow of the endolymph, which flow is augmented by this turning of the body.

We note that each of the semicircular canals has one end very much widened, called the ampulla, which contains the crysta, an elevation with nerve cells. We find on top of that crysta a gelatinous mass called cupola, and inserted into it a bundle of hair-like fibres projecting into the cavity of this ampulla, forming the end organ of the vestibular branch of the acoustic (8th) nerve. You can see at once that any flow of the endolymph within the semicircular canals in either direction must pull along or bend these fine hairs, like grass would bend in flowing water. This bending is what produces the stimulation.

The question whether the flow is towards the ampulla or away from it, determines the direction of the nystagmus.

We must not forget that we have two ears, that one must be stimulated positively and the other negatively simultaneously, in order to get a reaction directed to one side of the head. Positive stimulation occurs on the side where the flow is toward the ampulla, and vice versa. We have a sure method of producing physiological irritation in the Barany or caloric tests. It is the application of warm or cold in the form of water irrigation into the ear, either above or below the body temperature. This irrigation produces a change in temperature of these parts of the semicircular canals nearest to the water irrigation, and a consequent flow of the endolymph within the canals, in accordance with the well-known physical law, that warmed fluid rises, and vice versa. The cold irrigations, about 65 degrees Fahr., will cause a nystagmus to the opposite side of the ear irrigated; the warm to the same. This method has

the great advantage of being easily applied, and of allowing one side to be examined independently of the other.

Barany discovered this method in 1905, when patients in his clinic, whose ears were washed out by attendants, complained of dizziness and fainting spells. He found that the water in those cases was applied either too cold or too warm. He found a nystagmus in all of these cases, which was of a distinct type, and would take a fixed direction according to the temperature of the water, and that every person's ear would respond in the same way and in accordance with the same law. In that way Barany opened up an immense field for investigation, which is of the greatest use for diagnosis of a great many conditions. For that reason and for the work that he did in cerebellar localization, which would have been impossible without this diagnostic aid, he received his reward from the Nobel Prize Commission.

Now what is the cause of this nystagmus and what is the value of these manifestations? We find an elaborate network of nerve associations which may be likened to a telephone arrangement of a manufacturing plant. There is Deiter's nucleus in the cerebellar region and the cerebellum forming a central station. From this there is connection with the eye muscles, a connection with the organ of equilibrium or the vestibular part of the labyrinth through the acoustic nerve, which, in common with the facial nerve, enters the ear through its petrous portion. This central station also connects with the nerve centers of the spinal cord and even with the vagus nucleus. If you then stimulate the vestibular apparatus, you will first of all cause the innervation of the muscles of the eye, causing nystagmus. If the horizontal canal only is stimulated, we get a horizontal nystagmus. By changing the position of the head, you would get a rotary or vertical nystagmus according to the semicircular canals affected. But you will also get an effect on the spinal nerves, disturbing the equilibrium, and an effect on the stomach through the vagus, producing nausea or vomiting, and here you have the picture of a symptom complex that is so frequent either in part or in total, that we must know its significance in any given case. This same result will be produced if, instead of the end organ, the ear, the nerve coming from it, or the central area, the Deiter's nucleus or the cerebellar region should be stimulated or irritated as by disease. All these things follow fixed laws, most useful in our diagnostic tests, most of them laid down by Prof. Barany and only subject to slight variations or exceptions. It is now claimed, and with correctness, that this semicircular apparatus forms the diagnostic key, without which no examination of the intracranial conditions and the central nerve system can be complete. For instance, every patient's vestibular apparatus is tested in the Vienna neurological clinic. It is important to the ear surgeon to differentiate labyrinthitis from intracranial conditions, which he can now do. It is important for the surgeon to diagnose and localize cerebellar lesions, abscess of the brain, tumors, etc. A good example is fractures of the base of the skull.

Almost every fracture of the base of the skull involves some portion of one or both petrous portions of the temporal bone because these pyramids project into the vault of the cranium like ribs of a boat. In those fractures a bleeding from the external ear means, as a rule, a compound fracture. The same is the case when blood comes from nose or post-nasal space. The blood in this last instance escapes through the Eustachian tube as the ear-drum is not ruptured. This explains the great liability to infection of these lesions of the base of the skull, and the fatalities which follow them.

The facial and the auditory nerve both run through the petrous portions of the ear and are frequently injured. Facial paralysis, deafness, and nystagmus are frequent symptoms which help in the localization. It is of the greatest importance to the neurologist, to the internist, and to the syphilologist, for the diagnosis and differential diagnosis of the various diseases, such as multiple sclerosis, tabes, neuritis, the different toxaemias, intoxications, intracranial hemorrhage, and neoplasms.

Barany has evolved the theory that while the cerebral hemisphere furnishes innervation for muscular power the cerebellum is the organ of control for, such motion or the center for co-ordination, and that through the vestibular apparatus this can be proven. He followed out the suggestion of Bolk, of Holland, that there must be motion centers in the cerebellum. He found, that after irritating the semi-circular canals or stimulating them with hot or cold water, the patient who would point his index finger with extended arms to the examiner's fingers and lower the arm with his eyes closed and raise them again, trying again to touch the fingers, would have nystagmus to one

side and his finger would deviate in the opposite direction. The test of pointing the finger to one's nose as well as Romberg's test for equilibrium were known before. But Barany, through those tests, put all those things into system and law, so that certain directions must follow in the manifestations in certain kinds of stimulation.

When one makes a definite experiment of this kind at a definite point—or a pathological lesion exists in the cerebellar or labyrinth area—nystagmus and deviation in the pointing of the finger according to fixed rules must be the consequence.

Considering the positive results in all these tests, with the neurological associations involved, Barany tried certain other experiments. He applied ice to the exposed area of the cerebellum of trephined patients and found, thereby, locations acting as centers which correspond to the corresponding centers of motion in the cerebrum. These first or cerebellar centers provide the control to the power furnished by the cerebral centers. He found that he could, for the time the ice was applied, cut out control of certain groups of muscles, and demonstrate the disturbance by the creation of an otitic nystagmus and the deviation in the pointing. Up to the time the war began, he had definitely established a number of centers in the cerebellum, and also discovered that the vermiform process of the cerebellum supplies the trunk and body; the hemispheres of the cerebellum, the extremities and their muscles. Observations and tests by others who were in position to investigate proved the correctness of his theory, and it is only to be regretted that Prof. Barany was prevented from continuing his work, especially now where in Europe there must be an abundance of material and opportunity for such investigation. But let us hope that he will return safely after the war and that he will find others in the meantime have worked along his line and helped complete it.

It might be well for us to draw the important lesson, that we must examine the movements of the eyeballs in patients so that we will not treat every case of nausca and vomiting as a stomach case, dizziness as biliousness, disturbance of equilibrium as Meniere's disease, a disease which is not a disease at all but a symptom-complex, occurring in various conditions; also that dizziness must direct our attention to the ear and the cranial cavity. It might also be well to learn to apply and interpret these tests, a procedure not difficult in the ordinary case.

#### FLY POISON LEGISLATION.

From July to October, 1914, there were 46 cases of arsenical poisoning of children reported in the daily press. From May to October, 1915, 26 cases were reported—a decrease of 40 per cent. This we attribute to our arduous campaign.

CHILD BETTERMENT started its campaign against the FLY POISON PERIL in October, 1914. Since the publication of our first editorial on this subject, thousands of newspapers and periodicals have reprinted it either in part or in full.

The similarity of the symptoms of arsenical poisoning to those of cholera infantum make it quite certain that there were a great many more cases than were reported. Cholera infantum, one of the most common ailments of very young children, is prevalent at the time these poisonous fly killers are most used. Most of the children are too young to tell the eause of their illness, and unless seen taking the poison, arsenical poisoning may not be suspected.

Through our efforts, a bill was introduced and passed in the Michigan Legislature at its last session regulating the manufacture and sale of poisonous fly destroying devices. Legislators of other States can do a useful public service by introducing the same or similar bills. Copy of the Michigan bill can be had, free of charge, upon application to this office.

The phosphorous match was found to be dangerous and abolished. WHY NOT THE DANGEROUS POISON FLY KILLERS?

SWAT THE FLY POISON PERIL!!—Child Betterment and Social Welfare.

# OUR BULLETIN.

The Bulletin is the megaphone of the Calumet County Medical Society. It makes the noise that wakes you to the fact that our society lives, not only at the times of our meetings, but the year around. It is the bugle that ealls your attention to the reality of our society. Through it we blow the horn of the society and of the members collectively. It is the booster organ of the Calumet County doctors. There is no reason why our society should hide its light under the cloak of reticence. We are no hermits. When the members forget about the Calumet County Medical Society, then it is already too late to attend the funeral, and all that the secretary can do is to lay a phantom wreath upon its grave, because there is no money in the treasury to buy a real one: and then shed a tear of regret, one out of each eye. But there is no prospect of a funeral as long as the Bulletin, like the muezzin on the minaret, provokes a response to the call: "THE CALUMET COUNTY MEDICAL SOCI-ETY IS GREAT. GREAT IS THE COUNTY SOCIETY." -Bulletin of the Calumet County Medical Society, March, 1916.

# THE WISCONSIN MEDICAL JOURNAL

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L. M. WARFIELD, M. D., Editor
79 Wisconsin Street, Milwaukee

J. P. McMAHON, M. D., Managing Editor 141 Wisconsin Street, Milwaukee

Publication Committee:

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# **EDITORIALS**

# CORRECTION.

Through some unaccountable error the name of Maj. Phalen was spelled Whalen in the March number. We apologize for this mistake and trust that Maj. Phalen will not hold this against the Wisconsin profession. The Editor alone is responsible and he regrets the oversight more than he can say.

# NOTICE!

YOUR DUES WERE PAYABLE JAN. 1ST. UNLESS YOU HOLD A 1916 CERTIFICATE OF MEMBERSHIP YOU ARE NOW DELIN-QUENT AND ARE NOT UNDER THE PROTECTION OF MEDICAL DEFENSE. SEE THAT YOU ARE REINSTATED BY SENDING YOUR SECRETARY A CHECK TODAY. THERE IS DANGER IN DELAY!

#### HONOR LIST.

THE FOLLOWING COUNTY SOCIETIES HAD EITHER EQUALED THEIR LAST YEAR'S MEMBERSHIP, PASSED IT, OR HAD NO DELINQUENTS ON APRIL 1ST. (THOSE HAVING MADE A GAIN ARE INDICATED WITH A \*.) IS YOUR SOCIETY IN THIS LIST OF PROGRESSIVE SOCIE-

TIES? IF NOT—HAVE YOU DONE YOUR PART TO HELP PUT IT THERE?

CALUMET.
DUNN-PEPIN.
\*FOND DU LAC.

LINCOLN. \*OUTAGAMIE.

FOND DU L. GREEN. LA CROSSE. LANGLADE.

PORTAGE.

\*VERNON.
WOOD.

\*OZAUKEE.

### THE TYPHOID EPIDEMIC.

N the latter part of February and the first part of March, Milwaukee was suddenly visited with a serious situation. Typhoid fever, which for the past two years had been held well in check, suddenly assumed epidemic proportions. Cases began to be reported from all over the city, following no especial milk routes and attacking persons from every walk of life. There seemed to be no doubt that the epidemic was water-borne, particularly in view of the fact that fermenting, motile bacteria have been present in the water for several months. Milwaukee is a typical example of the American, petty-political-ridden city. For years one Health Commissioner after another has urged the proper disposal of sewage. Anyone with the smallest amount of gray matter in his cerebrum should have no difficulty in comprehending the fact that drinking water cannot be heavily polluted with sewage for long without producing deleterious effect upon some inhabitants.

About 54,000,000 gallons of sewage are dumped into the lake every day. It requires no vivid imagination to connect the water pollution with a

typhoid epidemic in view of the many well-studied epidemics all over the world for which polluted water supply was responsible.

Fortunately for Milwaukee, the Health Department is an active branch of the city's administration. As soon as it was evident that an epidemic existed, people were advised to boil all drinking water, the bubblers in the schools and those scattered over the city were shut off, warnings were sent to factories that the water was unfit to be drunk, and the Council was asked to appropriate a sum to enable the Health Department to handle the situation. The epidemic was checked; but not before nearly 250 cases had been reported and over twenty deaths had occurred.

Prophylactic vaccination has been given to hundreds of people. There is no longer any doubt that this measure has materially aided in reducing the incidence of typhoid fever. While there are cases reported in which typhoid has occurred after vaccination, the cases have all been mild and we do not know of any deaths. When it is possible for a man to recover from severe typhoid fever, and to die from a second typical attack the very next year, one should hesitate to condemn vaccination if he should know of a person now and then who was not absolutely protected.

Because vaccination will protect against typhoid is no argument for the continuous pollution of a city's drinking water. We hope that the members of the profession in Milwaukee will use their great influence to further the sewage disposal project so that a beginning may soon be made in relieving citizens from the unpleasant necessity of drinking diluted sewage.

# THE PROBABLE VERSUS THE UNUSUAL IN DIAGNOSIS.

THE ability to draw correct conclusions from deductive reasoning is the basis of diagnosis. It makes little difference what the problem is, the elemental facts must be obtained, arranged in orderly sequence, and deductions made from the facts as presented. To look for bizarre hypotheses when cold facts stare one in the face represents a characteristic of mind more given to imagination than to reason.

The obvious is not always apparent to the observer. He has in his mind the idea that he will at any time come across something unusual, and this often unbalances his better judgment. The

instructor who teaches medical students has this borne in upon him frequently by the strange answers he receives from students in response to simple questions. The student is almost always willing to reveal all he knows, and in his efforts to tell all the possibilities, however remote, in a case under consideration, he often fails to see what is staring him in the face. Unfortunately this wandering after the unusual may lead to serious consequences. As an example of this, let us cite a recent case which happened in a large city. A typhoid epidemic was at its height in this city. Under such conditions it is well known that the disease, protean in character always, assumes various types and offers, at times, great difficulty in diagnosis. However, the probability that an atypical case of fever is typhoid and not some other disease, under such circumstances, is great. An atypical case did occur. It was diagnosed as typhus fever. The newspapers made comment on it and a considerable stir was created.

Typhus is a very rare disease in this part of the country. The probable there was evident. Autopsy revealed the typical lesions of typhoid fever.

It is easy to err. No one can criticize his neighbor for a mistake. We only wish to call attention to a tendency which is not uncommon. Care in observation, probabilities, and reasoning from established facts will usually help one to avoid pitfalls.

# CONCERNING MANUSCRIPT FOR PUBLICATION.

If every doctor had even a very limited experience as an Editor of a Medical Journal he would appreciate the trials and tribulations of one of the species. The greatest burden which an Editor has to bear is caused by the carelessness of those who submit papers for publication. It is quite incomprehensible that a physician who considers that he knows enough to write a paper, should write it in language which is obscure, ungrammatical, and frequently not even English of a school-boy sort. If the Editor allowed some papers to be published without almost rewriting them, the Journal would be a laughing-stock among the profession. Often, too, when a paper has to be largely rewritten because of the involved sentences or lack of proper sentence construction, the author charges that his

meaning was twisted. There is only one remedy for that situation. Let authors write their papers in correct English and they will have no cause for complaint against an Editor.

An Editor expects to read over every paper and put it in form for printing, but he should not be called upon to write the author's paper from the title to the conclusion.

#### SUICIDE OR MURDER?

It is always sad when a man takes his own life. It strikes us as a cowardly act. However, we never know what the mental anguish is in those who voluntarily end it all by suicide.

The case of Dr. Theodore B. Sachs is particularly sad. It is sad to contemplate the condition of civic life which allows calumny and lying and nasty innuendo to be hurled broadcast at a man who honestly tries to improve conditions. It is sad to think that an apparently strong character should allow such low barkers to move him to the point of suicide.

Dr. Sachs was a big man, doing big things. He was fighting in the open against forces which were cunningly laying for him in dark alleys and byways. He evidently was all too sensitive to criticism. His nature had not developed the kind of covering against which slanderous attacks fell imperceptibly.

But there is a lesson for us all, Brethren of the Medical Profession. We are surrounded by hydraheaded, underhanded politics manipulated by men who stop short of nothing to gain their ends. Then let us stand together. Show a solid phalanx for the right thing. Smash the hydra-headed monster every time he raises a head. Finally we will win and then there will be no such tragedy, no such murder, as has recently been committed upon one of the most loyal and unselfish of our Profession.

# THE TOXICITY OF EMETIN HYDRO-CHLORID.

PYORRHEA alveolaris is a common affection.
It has received a great amount of attention since the ameba buccalis was found in the scrapings from the pockets between the teeth and gums. Much has been written on the wonderful

effect of injections of emetin hydrochlorid in ridding the mouth of amebae. No one has called attention to the probable ill effects of injection of this drug, which has a distinct toxic action on animals. . Recently, however, Levy and Rowntree\* report a case of death following the injection of the drug in a man 56 years old who received daily injections of 11/2 grains over a period of twenty days. The dose was altogether 25 mg, per kg, of body weight. In another case, a woman of 31 years, alarming dysentery was produced, a toxic delirious state developed and the urine contained She received only 1/2 albumin. grain daily for four days. Dogs, cats, and rabbits received injections in order to determine the fatal dose. In dogs and rabbits the fatal dose was from 1 to 2, and 3 to 4 mg. per kilogram when given subcutaneously for a period of seven to ten days. The authors found that there were wide variations in toxicity among preparations marketed by several firms. For one preparation a total dosage of 3 mg. per kg. given subcutaneously killed dogs in three days, whereas it took eleven days and 19 mg. per kg. of another preparation to produce a fatal out-

It is well to know that this method of treating pyorrhea alveolaris is not only lacking in results in many cases but also may cause most unpleasant effects, chief of which are a pseudo-dysentery, the stools containing pus and blood. Practitioners should be careful in using this remedy. If one follows the recommendation of the conservatives, that is, 1½ grams daily for no longer than six days, he will usually be on the safe side unless a patient has an idiosyncracy to the drug. Forewarned is forearmed. We trust that this may not be too late to save some patients from serious results of strenuous attempts to rid their mouths of amebae.

### MILK-BORNE SEPTIC SORE THROAT.

HERE have been a number of wide-spread and sudden epidemics of sore throat traced to milk supply. The severity varies all the way from simple sore throat without constitutional symptoms to most violent infection producing sinusitis, mastoiditis and even peritonitis. Intensive studies of these epidemics have shown that all oc-

<sup>\*</sup>Levy, R. L. and Rowntree, L. G., Arch. Int. Med., 1916, XVII, 420.

<sup>\*</sup>Krumwiede, C. Jr., and Valentine, E., A Bacteriological Study of an Epidemic of Septic Sore Throat, Jour, Med. Research, 1915, XXXIII, 231.

curred along certain milk routes and could be traced to one dairy and, at times, to the milk from one cow. The important question of the human or bovine origin of the epidemic has been a matter of dispute. In all cases the organism causing the epidemic has been shown to be a hemolytic streptococcus, that is, a strain of streptococci which, when grown on blood-agar, produces a zone of hemolysis about every colony. In their cultural characteristics, especially in their power to ferment certain types of sugars, they show specific differences from ordinary streptococci.

The latest carefully studied epidemic is reported by Krumwiede and Valentine\* and is of interest because of its completeness. The outbreak occurred during June, 1914, in Rockville Center, Long Island, a village of 4,250 inhabitants. The suspected milk came from one dairy housing twenty-two cows. Two hundred and five out of two hundred and thirty-two cases obtained milk from this source. It was found that a milk supply making up twenty-five per cent of the total milk distributed was responsible for ninety per cent of the cases.

The investigation showed with all reasonable certainty that the following sequence of events took place. "Miss W., April 16th (daughter of owner of dairy). Sore throat; contact infection to Mrs. W. (who did much of the milking), May 9th; contact infection from one of these to driver, May 11th; one of the latter two, probably Mrs. W., infected the cow; multiplication of the streptococci in the milk duets and in the milk, culminating in the outbreak."

The organism which was cultivated from the throats of humans, from the udder of the cow, and from the milk was a hemolyzing streptococcus. One case of fatal peritonitis occurred. The streptococcus cultivated from this case was similar to the strains isolated from one cow.

The authors conclude that this proves the human origin of the epidemic. "The fact that the cow infected with the 'human' streptococci had no physical evidences of mastitis, whereas another cow having mastitis yielded another unrelated 'bovine' variety of streptococcus, is also of value as evidence in this connection."

Very recently it was learned that a most violent epidemic occurred at Exeter School for Boys. One hundred and seventy-five cases were infected, with seven deaths. The complications were numerous and serious. They were, for the most part, frontal sinus and mastoid infections. Details of this epid-

emic are lacking but what evidence is at hand points to a milk-borne source.

These outbreaks, which have occurred in widely scattered parts of the country, reveal the need of greatest care in handling the milk supply. A number of diseases which break out in epidemics have been definitely traced to contaminated milk. Therefore, stringent regulations providing for adequate inspection of dairies, clean handling of milk and care in keeping it uncontaminated during the processes of distribution to customers, may seem a hardship to some but are absolutely essential to safeguard the lives of the people.

# DANGER!

A DELINQUENT MEMBER IS IN THE SAME POSITION AS A MAN WHO HAS ALLOWED HIS LIFE INSURANCE OR HIS FIRE INSURANCE TO LAPSE. DOES NEGLIGENCE PAY? ARE YOU WILLING TO TAKE THE CHANCE? IS NINETY DAYS TOO SHORT A TIME TO "GET AROUND TO" MEET YOUR OBLIGATIONS?

# SANITARY CONDITION OF BOTTLED WATERS.

The Bureau of Chemistry for several years has been investigating the sanitary conditions in the production and distribution of bottled mineral and table waters, which are offered for sale in interstate commerce and therefore subject to the Food and Drugs Act. It is recognized that the sale of bottled waters is dependent largely upon the belief by the public in the purity of the product. The Bureau has recently conferred with a large number of sanitary experts and bacteriologists regarding a desirable standard for judging the sanitary character of bottled waters. As a result of the investigational work and the above mentioned conferences the Bureau believes that the tolerances established by the Public Health Service of the Treasury Department for waters served on interstate carriers is none too rigid for application to bottled waters sold in interstate commerce or imported from foreign countries. The Treasury Department standards are as follows:

- 1. The total number of bacteria developing on standard agar plates, incubated 24 hours at 37° C., shall not exceed 100 per cubic centimeter; provided that the estimate shall be made from not less than two plates, showing such numbers and distribution of colonies as to indicate that the estimate is reliable and accurate.
- 2. Not more than one out of five 10 cc, portions of any sample examined shall show (by the method of the Public Health Service) the presence of organisms of the bacillus coli group.

# THE STATE MEDICAL SOCIETY OF WISCONSIN

ORGANIZED 1841

Officers 1915-1916

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Alternates EDWARD EVANS, La Crosse

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NEXT ANNUAL SESSION, MADISON, OCTOBER, 1916.
The Wisconsin Medical Journal, Official Publication

	LIST OF	EXECUTIVE	OFFICERS OF COUNTY MEDIC	AL SOCIETIES.
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Dodge		<u>R</u> .	E. Bachhuber, Mayville	E. S. Elliott, Fox Lake.
Door		H.	F. Eames, Egg Harbor	T. C. Proctor, Sturgeon Bay,
Douglas		үү. नि	E. Butler, Menomonie	I V Grannia Manamania
Ean Claire			C. Baird. Eau Claire	E. P. Haves, Eau Claire.
Fond du Lac		A.	J. Pullen, North Fond du Lac	H. C. Werner, Fond du Lac.
Grant		E.	MacDonald, Cuba City	M. B. Giasier, Bioomington.
Green		W	B. Gnagi, Monroe	L. A. Moore, Monroe,
Green Lake-Wash	ara-Adams	G.	E. Baldwin, Green Lake	J. A. Freudenberg, Markesan.
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Tunesu			C Vocei Firov	A T Gregory Eirov
Kenosha			C. Vogel, Elroy. H. Cleary, Kenosha	J. J. McShane, Kenosha.
La Crosse		H.	E. Wolf, La Crosse. C. Hubenthai, Beimont. V. Watson, Antigo.	J. M. Furstmann. La Crosse.
Lafayette		J.	C. Hubenthai, Beimont	H. O. Shockley, Darlington.
Langlade		· · · · · · · · · · · · · · · · · · ·	V. Watson, Antigo	J. C. Wright, Antigo.
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Manitowoc	• • • • • • • • • • • • • • • • • • • •	A.	M. Farrell, Two Rivers	W. E. Donohue, Manitowoc.
Marathon		·····	E. Axteil, Marinette	R. M. Frawley, Wausau.
Milmonlyon		Er	anz Pfister Milwankee	Daniel Hankingen Milwaukee
Monroe		L.	G. Sheurich, Tomah	Spencer D. Beebe, Sparta.
Oconto		J.	B. Atwood, Oconto	R. C. Fauids, Abrams.
Oneida-Forest-Vii:	as	J.	G. Sheurich, Tomah. B. Atwood, Oconto T. Eiliott, Rhinelander	C. A. Richards, Rhinelander.
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Ozaukee	• • • • • • • • • • • • • • • • • • • •	U.	J. Heuth, Cedarburg	D. H. Coirng, Pivor Folia
Pierce		MZ	W. Gregory, Stevens Point	I D Lindores Stevens Point
Price-Taylor			M Nedry Medford	E. B. Elvis, Medford.
Paoino			C Buchan Racine	Susan Jones, Racine.
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Thompsoicen Teels	con Buffaio	()	O Nelson, Arcadia	J. J. FOWEII, GRIESVIIIE,
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THE LANGE OF THE PARTY OF THE P		1.7	Albord Ailonton	S J Driessel Barton
Waukesha			B. Noble, Waukesha	G T Dawley New London
Wood		T	P Vedder, Marshfield	W. G. Sexton, Marshfield.
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# SOCIETY PROCEEDINGS

#### COLUMBIA COUNTY

The Columbia County Medical Society held its regular meeting on March 8, 1916, in the city hall at Portage. A committee of three was appointed to consider the advisability of having a public health meeting under the direction of the society, and if so, find the best way, time and place for conducting the same. Motion was also made and carried that the society take part in our District meeting, to be held during the month of May, preferably in Madison. Drs. Walter C. Jones of Kilbourn and Edward J. Ziegler of Oxford were admitted to membership.

Dr. A. J. Batty of Portage gave a fine talk on Obstetric Technic, and if every doctor who does obstetrical work would follow Dr. Batty's advice, puerperal septicemia would be a thing of the past. A general discussion followed the reading of this paper.

A. F. SCHMELING, Secretary.

#### MARATHON COUNTY

Marathon County Medical Society met on March 25, 1916, at Wausau. The afternoon was devoted to a clinic at the office of Dr. L. M. Willard, the evening to a banquet at the Wausau Club. Dr. Louis F. Jermain, president of the State Association, was a guest of honor.

### MILWAUKEE COUNTY.

At a meeting of the Medical Society of Milwaukee County held on March 11, speeches were made for and against the contention that the condition of the city water caused the epidemic of typhoid fever. No statistics were quoted but assertions were made on each side. Drs. G. C. Ruhland and E. B. Brumbaugh of the Health Department addressed the society. Drs. J. M. Beffel, G. J. Kaumheimer and I. D. Mishoff also spoke.

#### SHEBOYGAN COUNTY

The regular monthly meeting of the Sheboygan County Medical Society was held on March 15, 1916, at the Elks' Club, Sheboygan, where a banquet of five courses was served. Covers were laid for twenty-five which included the dentists of the city. Dr. R. Ivy of Milwaukee gave an address on Regulation of Mouth Infection to Systemic Diseases, which was illustrated with lantern slides.

#### SURGICAL STAFF OF THE NORTHWESTERN.

The surgical staff of the Northwestern Railroad held a three day clinic at St. Joseph's Hospital, Ashland, March 17-18-19. Those who attended werc; Drs. C. W. Hopkins, Chicago, head surgeon of the road; C. A. Critchlow, Mellen; J. W. Tartar, Iron River; F. Hawley, Mercer; A. P. Andrews, Ashland; C. J. Smiles, R. J. Hendricks, Ashland; F. D. Madagascar, Ironwood; P. C. Prouty, Wakefield; D. C. Pierpont, Ironwood; W. J.

Prinhartz, Bessemer; H. G. Mertens, Bayfield; H. A. Hosmer, Dell Andrews, J. M. Dodd, C. O. Shaw, A. B. Wenzel, Ashland; F. J. Johnson, Iron River; T. B. McIndoe, H. Hammond, Bayfield.

# NEWS ITEMS AND PERSONALS

DR. WALTER S. STEVENS, U. S. I. S., agency physician at Keshena, has been appointed school physician at Mount Pleasant, Mich.

Dr. Norman Hoffman, formerly superintendent of the State Tuberculosis Sanatorium, has reopened his office in Milwaukee.

Dr. C. B. Boyd, Kaukauna, is a candidate for mayor of that city.

Dr. G. A. Bading was defeated by Daniel W. Hoan, socialist candidate, for mayor of Milwaukee.

Dr. Julius Bruess, Milwaukee, who recently suffered a nervous breakdown, is convalescent.

DR. R. D. BOYNTON has tendered his resignation as assistant surgeon at the Wisconsin Veterans' Home, Waupaca, and located at Grand Marsh, Adams County, for the practice of his profession.

DR. MICHAEL RAVN, Merrill, was fined \$25.00 for contempt of court, on March 21, in the \$5,000 malpractice suit that is being brought against him. On advice of his attorneys, Dr. Ravn declined to answer, his contention being that his information in the case was in connection with prescribing for his patient and therefore privileged. The court held him in contempt however. It is stated that the case will be appealed to the Supreme Court.

Dr. C. W. Andrews, Waupaca, has received his commission as First Lieutenant in the Medical Reserve Corps, which appointment came as the result of a civil service examination.

Dr. J. R. Hughes, Dodgeville, was appointed physician for the Iowa County Home and Asylum, on March 10th.

Dr. A. A. Busse, Jefferson, has been appointed examiner for the Wisconsin State Tuberculosis Sanatorium.

DR. MARGARET CALDWELL, Waukesha, on March 3, 1916, celebrated the fortieth anniversary of her graduation from medical school, and on this occasion she entertained the members of the Waukesha County Medical Society.

Dr. George F. Mason, Milwaukee, who has been ill for some weeks, is now convalescent.

Dr. B. F. McGrath, professor of junior surgery at Marquette University Medical School, has returned from New York City, where he prepared a course in junior surgery for this semester.

Dr. H. J. Haiselden, Chicago, was suspended from membership in the Chicago Medical Society on March 15 for "conduct unbecoming the ethics of the profession." This action was the result of the Baby Bollinger case. Dr. Haiselden has the right of appeal to the Illinois Medical Society.

Two suits for \$10,000 cach have been filed against the city of Milwaukec, as the result of deaths from typhoid fever. In both suits it is alleged that the typhoid resulted from pollution of the city water by sewage, and that the city was negligent in permitting its discharge into the lake.

DR. H. W. ROTH, former director of the Milwaukee Passavant Hospital, now director of the Passavant Hospital at Pittsburgh, Pa., is conducting a campaign for \$100,000 to double the capacity of the Pittsburgh institution.

Because the building now used as an isolation hospital at the Milwaukee County Hospital at Wauwatosa is inadequate to house and properly care for patients with contagious and infectious diseases, a resolution will be introduced at the next meeting of the county board to have a large isolation hospital built. It is believed that owing to the urgent need for the building, the county board will adopt the resolution.

Milwaukee physicians will no longer examine indigent tuberculosis patients. Under the old practice tuberculous patients, after being examined by health department physicians, were sent to the county court, where another examination was demanded under the statute. This examination was made by physicians appointed by the county judges who received a fee of \$4.00. Patients in the future will be examined by the county physicians without charge.

The death rate among the insane confined in state and county institutions is one a day, according to a statement of M. J. Tappins, secretary of the State Board of Control. The insane population in public institutions for February was 7,697.

Of these 1,268 are in the state hospitals, 95 in the hospital for the criminal insane, 434 in the Milwaukee Hospital, and 5,900 in county institutions. Of the total insane 4,358 are males and 3,339 females.

Seven doctors and four nurses are required to look after the health of 4,868 students attending the University of Wisconsin, and judging from the statistics compiled for the past five years, they will be obliged to hold 27,500 office consultations and make over 7,300 house and hospital visits during the year 1916-17 in order to keep a healthy student body, says a U. S. Bulletin.

Continued evidences of improvement in sanitary conditions of Wisconsin hotels and restaurants were reported to the State Board of Health for February by the three state hotel inspectors. In Milwaukee out of 77 places inspected, only five needed formal orders for remedying insanitary conditions; 57 inspections in Oshkosh, 12 orders; 86 in Madison, 24 orders; 37 in La Crosse, 21 orders; 24 inspections in Eau Claire resulted in 3 orders. Rhinelander apparently underwent a general clean-up in this line. There were 11 orders out of 19 inspections.

The optometrists of the State are said to be demanding the establishment of a department of optometry in the State University at Madison.

A course of six lectures on Military Administration, Medicine, and Surgery will be given at the College of Physicians and Surgeons on Tuesdays, at 5 P. M., beginning March 28. The lectures will be given by Major Joseph H. Ford, Medical Corps, U. S. A.; Major Sanford H. Wadhams, Medical Corps, U. S. A.; Capt. Philip W. Huntington, Medical Corps, U. S. A.; and Lieut. Col. W. S. Terriberry, Medical Corps, N. G. N. Y. The lectures will be open to the general medical public as well as to the students of the College of Physicians and Surgeons.

March 28. Organization, Equipment and Training of Armies, Lieut. Col. Wm. S. Terriberry; April 4. Organization of the Medical Department and its service in campaign, Major Jos. H. Ford; April 11. Wounds in War, their complications and treatment, Major Ford; April 18. The Personal Hygiene of the Soldier, Major Sanford H. Wadhams; April 25. Camp Sanitation, Capt. Philip

W. Huntington; May 2. Preventable Diseases in War, Capt. Huntington.

> SAMUEL W. LAMBERT, Dean, Columbia University, College of P. & S.. New York City.

437 West 59th St.

The conditions annexed by the testator of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery are that the prize "shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty printed pages, octavo, in length, illustrative of some subject in Surgical Pathology or Surgical Practice, founded upon original investigations, the candidates for the prize to be American citizens."

It is expressly stipulated that the competitor who receives the prize, shall publish his essay in book form, and that he shall deposit one copy of the work in the Samuel D. Gross Library of the Philadelphia Academy of Surgery, and that on the title page, it shall be stated that to the essay was awarded the Samuel D. Gross prize.

The essays must be written by a single author in the English language, should be sent to the Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, c/o College of Physicians, Philadelphia, on or before January 1. 1920. Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay. The Committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year. Committee reserves the right to make no award if the essays submitted are not considered worthy the prize. The prize is \$1,500. The trustees are Drs. Wm. J. Taylor, John H. Jopson and Edward B. Hodge.

The Faculty of the College of Physicians and Surgeons, Columbia University, have unanimously voted in favor of the establishment of a dental department, to be connected with the medical school. A committee of prominent dentists of New York City have presented plans to the Medical Faculty which have been approved. The school of dentistry will be closely associated with the medical school and the admission requirements will be the same as the medical. The course will be four

years, the first two years the same as those in medicine. At the end of the second year the dental student will give all his time to the study of dental subjects, namely, operative dentistry, prosthetic dentistry, oral surgery and oral pathology, orthodontia, etc., and the more technical part of the work required for the well trained dental surgeon. This new school will be the first university dental sehool in New York City and the second in the state.

Among the many agencies now active in the campaign against caneer, several of the most progressive state boards of health are making notable efforts to spread the gospel of hope in which is found in the early recognition of the danger signals of the discase and its prompt and competent treatment. The health authorities of Massachusetts, New Hampshire, Ohio, Indiana, Michigan, Virginia, North Carolina, Kentucky, West Virginia and Idaho have been especially active in disseminating trustworthy information and advice about the prevention and cure of cancer. The New York State Health Department, under the leadership of Commissioner Herman M. Biggs, is the latest to enlist its forces in the war against cancer. The entire March number of Health News, the Department's Monthly Bulletin, is devoted to a consideration of the nature, prevalence and treatment of malignant disease. Among the contributors to this number are: Dr. Francis Carter Wood, Director Cancer Research, Columbia University, Frederick L. Hoffman, Statistician Prudential Insurance Co., and Dr. Harvey R. Gaylord, Director New York Institute for the Study of Malignant Disease. Free copies of this number may be had by addressing the State Department of Health at Albany, N. Y.

Several Washington druggists have pleaded guilty to the charge of selling adulterated and misbranded Tincture of Iodine, according to a recent issue of the Service and Regulatory Announcements of the Bureau of Chemistry. Samples of Tincture of Iodine were purchased under authority of the Secretary of Agriculture from a number of Washington druggists by inspectors of the Health Department. Analysis of the samples showed that many of them were deficient in some ingredient essential to a full strength tincture. The Food and Drugs Act provides in substance that, when a drug is sold under a name (such as

Tincture of Iodine) that is recognized in the United States Pharmacopoeia, it must conform to the standard of strength, quality, or purity, as determined by the test laid down in the Pharmacopoeia, or contain a statement on the label showing its true standard of strength, quality or purity.

The addition of saponin to food mixtures which are sold for use in place of white of eggs is regarded by the Bureau of Chemistry of the Department of Agriculture as constituting adulteration within the meaning of the Food and Drugs Act. In "Service and Regulatory Announcements No. 17," it is stated that the practice is usually adopted for the purpose of concealing inferiority and that therefore it comes within the definition of adulteration in the Food and Drugs Act. Saponin is used extensively in so-called substitutes for white of egg for the purpose of producing foam and thus giving the articles a fictitious appearance of body and therefore of food value.

The National Convention of Mental Hygiene Workers met at New Orleans on April 3-4, 1916, at the Hotel Grunewald, under the auspices of the National Committee and the Louisiana Society for Mental Hygiene. Addresses were delivered on problems relating to the feeble-minded, the insanc, the inebriate, the epileptic, and that large group of people, who, through mental causes, are unable to adjust themselves to their environment as to live happy and efficient lives. Mental hygiene in relation to education was also discussed.

The United States Civil Service Commission announces an open competitive examination for Chief Statistician for Vital Statistics, for men only. From the register of eligibles resulting from this examination, certification will be made to fill a vacancy in this position in the Bureau of the Census, Department of Commerce, Washington, D. C., at a salary of \$3,000 a year, and vacancies as they may occur in positions requiring similar qualifications, unless it is found to be in the interest of the service to fill any vacancy by reinstatement, transfer or promotion. Competitors will not be assembled for examination but will be rated on the following subjects, which will have the relative weights indicated: 1. Practical tests in statistics-20 weights; 2. Thesis-20 weights; 3. Education — 25 weights; 4. Experience — 35 weights. Graduation from a recognized medical

school and at least four years' experience in charge of the vital statistics of a city or a state, or in a position of similar importance requiring expert knowledge of vital statistics are prerequisites for consideration for this position. Special credit will be given for experience in the practice of medicine and in positions of an executive character. Statements as to education, experience, and fitness are accepted subject to verification. Applicants must have reached their 30th but not their 50th birthday on the date of the examination, they must also have domiciled in the state or territory in which they reside for at least one year previous to the date of the examination. This examination is open to all men who are citizens of the United States and who meet the requirements. Those desiring this examination should apply to the United States Civil Service Commission, Washington, D. C., the secretary of the United States Civil Service Board, Post Office, Boston; Philadelphia, Atlanta, Cincinnati, Chicago, St. Paul, Seattle, San Francisco, Customhouse, N. Y. City, New Orleans, Honolulu, Old Customhouse St. Louis, Administration Bldg., Balboa Heights, Canal Zone, or to the Chairman of the Porto Rican Civil Service Commission, San Juan, P. R. Applications must be filed with the Commission at Washington, prior to the close of business on April 25, 1916.

The next examination for admission into the Medical Corps of the Navy will be held on or about June 16, 1916, at Washington, D. C.; Boston, Mass., New York, Philadelphia, Norfolk, Charleston, Chicago, Mare Island, Cal., and Puget Sound. Successful candidates are appointed Assistant Surgeons in the Medical Reserve Corps, and if so recommended are subsequently assigned to duty, with full pay and allowances, in attendance upon a course of instruction at the Naval Medical School, Washington, D. C. This course begins annually about October and lasts six months. Upon completion student officers are given their final examinations and if found qualified are commissioned as assistant surgeons in the regular Medical Corps of the Navy. Full information with regard to physical and professional examinations, with instructions how to submit formal application, may be obtained by addressing the Surgeon General of the Navy, Navy Department, Washington, D. C.

Among a list of payments to unaffiliated organizations made by the Rockefeller Foundation dur-

ing 1915 upon the designation of Mr. John D. Rockefeller are: The Committee on Prevention of Tuberculosis of New York, \$500; Eugenic Field Workers, \$2,700; Hospital Saturday and Sunday Association, \$5,000; National Association for the Study and Prevention of Tuberculosis, \$500; New York Milk Committee, \$4,000; Rockefeller Institute for Medical Research (Corporate Purposes), \$8,854.17; Rockefeller Institute for Medical Research (for Buildings), \$570,559.71.

# REMOVALS

Dr. E. Hoffman, Belleville to Lone Rock.

Dr. A. B. Jensen, Neenah to Menasha.

Dr. Henry Wahle, Marshfield, has disposed of his practice, and it is reported will locate in the west.

Dr. O. N. Mortenson, who last fall disposed of his practice at Waupaca, and who has recently been in Chicago and Menasha, has gone into partnership with Mrs. Bellin and Buchanan at Green Bay.

Dr. Joseph Mountin, who recently located at Hartford, has accepted a position as chief of the free dispensary service of Marquette University, in addition to which he intends to do private practice in Milwaukee.

# DEATHS

Dr. William Louis Rodman, Philadelphia, president of the American Medical Association, died at his home on March 8, 1916, after a short illness of pneumonia, aged 57 years. Dr. Rodman was graduated from Jefferson Medical College in 1879. His chief contributions to literature were the oration on "Gastric Ulcer," a paper on "Cancer of the Breast"; a monograph on "Diseases of the Mammary Glands," and chapters contributed to the International Text Book of Surgery, Keen's System of Surgery, and Bryant & Bush's Practice of Surgery.

Dr. Charles W. Williams, Minneapolis, who was born and raised at Dodgeville, Wisconsin, died on March 10, at his home in Minneapolis, aged 53 years. He was a graduate of the Northwestern University Medical School, class of 1891.

Dr. John L. Johnson, Milwaukee, died on March 21, 1916, aged 39 years. Dr. Johnson was born at Jefferson, Wisconsin. He left there in 1898 and enlisted in Company B, First Wisconsin Regiment, and served in the Spanish-American War. Upon his return from the war he entered Milwaukee Medical College, now Marquette, and graduated in 1902.

Dr. F. S. Reynolds, Naimo, British Columbia, died on March 2nd, 1916, aged 65 years. Dr. Reynolds began practicing medicine at Oak Grove, Dodge County, forty years ago. Later he came to Neosho, and after a few years located at Hartford. During Cleveland's administration he accepted a federal appointment at Juneau, Alaska. He afterwards became interested in mining and newspaper work, and at the time of his death was editor of a newspaper at Naimo.

Dr. Charles H. Marquardt, La Crosse, died on March 30, 1916, of pneumonia, aged 61 years. Dr. Marquardt was born in Nemrin, province of Pomerania, Germany, January 6, 1855. In 1868 he came to La Crosse with his parents. For a short time he worked as an apprentice in a drug store, and in 1874 went to Philadelphia, where he graduated from the Philadelphia College of Pharmacy in 1876. For three years following he conducted a drug store at Council Bluffs, Ia., and then entered Jefferson Medical College, Philadelphia, where he graduated in 1882 and immediately came to La Crosse, where he resided up to the time of his death. He was at one time a member of the State Board of Examining Physicians, a member of the school board of La Crosse and city physician of La Crosse. He was a member of La Crosse County and the State Medical Societies.

Dr. John Specht, Superior, died at the Eitel Hospital, Minneapolis, on March 16, 1916, following an operation for appendicitis, aged 55 years. Dr. Specht was born at Black River Falls, Wisconsin, in 1861. He received his medical education at College of Physicians and Surgeons, Keokuk, Iowa, from which institution he graduated in 1883. Upon graduation he practiced for a time in one of the Dakotas. After a short stay in the west he came to Superior, and had practiced there for about thirty years. He was at one time health commissioner of Superior and was a former president of Douglas County Medical Society. He was a member of the State and Douglas County Medical Societies.

Dr. William P. McGovern, Cedarburg, died on March 24, 1916, aged 58 years, after an illness of several years duration. Dr. McGovern was born at Elkhart Lake, Wisconsin, October 14, 1858. He was graduated from Rush Medical College, Chicago, in 1882. After graduation he immediately came to Cedarburg and established a practice, where he resided up to the time of his death.

PROGRAM WISCONSIN SURGICAL ASSOCIATION, CLINICAL SESSION, MILWAUKEE, WISCONSIN. WEDNESDAY AND THURSDAY, MAY 10TH AND 11TH, 1916. HEADQUARTERS, THE HOTEL WISCONSIN.

#### OFFICERS.

President—Gregory Connell, Oshkosh, Wis. Vice-Presidents—First, Chas. H. Lemon, Milwaukee: Second, J. M. Dodd, Ashland; Third, Earl Doege, Marshfield; Fourth, D. J. Hayes, Milwaukee.

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Program Committee—W. C. F. Witte, Chas. H. Lemon.

Committee of Arrangements—L. Λ. Fuerstenau, M. L. Henderson, Eugene Λ. Smith.

# WEDNESDAY, MAY 10TH.

#### CLINICS.

St. Mary's Hospital.

8-10 Dr. Jas. A. Bach—Eye and Ear.

10-12 Dr. W. C. F. Witte-General Surgery.

2- 4 Dr. D. J. Hayes—Genito-Urinary.

# Milwaukee Hospital.

8-10 Dr. C. A. Evans—General Surgery.

2- 4 Dr. R. G. Sayle—General Surgery.

# Mount Sinai Hospital.

8-10 Dr. J. L. Yates—General Surgery.

8-10 Dr. W. E. Grove-Eye and Ear.

# Trinity Hospital.

8-10—Dr. M. L. Henderson—Gynecology.

2- 4 Dr. L. C. Tisdale—General Surgery.

St. Joseph's Hospital.

9-11 Dr. F. A. Stratton—General Surgery.

9-11 Dr. A. G. Kreutzer-Ear, Nose and Throat.

2- 4 Dr. A. H. Levings-General Surgery.

# EVENING SESSION-6:00 P. M.

# Dinner—Hotel Wisconsin. Election of Officers.

 Preparedness of the Medical Department—Maj. Jas. R. Scott, Appleton, Wis.

General Discussion.

2. The Diagnosis and Surgical Treatment of Indurated Duodenal Ulcer—Drs. J. A. Jackson, Jr., and R. H. Jackson, Madison, Wisconsin. Diagnosis based on History, Roentgenological findings, Physical examination, Laboratory reports. Increased value of Roentgen findings with improved technique. Deformity of Duodenal Cap as shown in the radiograph, confirmed by operative findings. Illustrative Radiographs of normal and diseased conditions. Surgical treatment based on correction of physiological aberration and mechanical obstruction. Consideration of procedures available. What shall be done with the ulcer? Resection of the ulcer-bearing area with gastro-enterostomy, the ideal procedure when feasible.

Discussion—Dr. J. R. Lyman, Eau Claire. Dr. W. C. F. Witte, Milwaukee.

# THURSDAY, MAY 11TH.

#### CLINICS.

St. Mary's Hospital.

8-12 Dr. G. V. I. Brown—Oral Surgery.

2- 5 Dr. W. C. F. Witte-General Surgery.

# Milwaukee Hospital.

8-12 Dr. H. A. Sifton—General Surgery.

8-10 Dr. H. B. Hitz-Ear, Nose and Throat.

2- 4 Dr. H. Reineking—General Surgery.

# Mount Sinai Hospital.

8-10 Dr. H. Greenberg—General Surgery.

8-10 Dr. P. H. Dernehl—Eye and Ear.

# Trinity Hospital.

8-11 Dr. Chas. H. Lemon—General Surgery.

8-10 Dr. Franz Pfister-Ear, Nose and Throat.

St. Joseph's Hospital.

8-11 Dr. A. H. Levings—General Surgery.

2- 4 Dr. C. M. Echols—Gynecology.

# EVENING SESSION-8:00 P. M.

#### Hotel Wisconsin.

- The Surgical Treatment of Pharyngeal Defects
   Due to Ill-advised Tonsil and Palate Operations—Dr. G. V. I. Brown, Milwaukee.
   Discussion.
- 2. The Transplantation of Fat and Fascia Flaps in Surgery—Dr. Victor Marshall, Appleton. A voluminous literature exists concerning this field of surgery. Kirschner was among the first to advocate its general use. The advantages of autogenous transplants over other material are many and varied. The application of fascial transplants is manifold.

Discussion—Dr. J. C. Combs, Oshkosh.
Dr. Edw. Quick, Milwaukee.

 The Story of Cerebral Decompression—Dr. H. M. Brown, Milwaukee.

During the session the following demonstrations will be given at Marquette University, Medical Department:

### Department of Pathology:

- 1. Gross and microscopic specimens illustrating the tissue reaction to the Typhoid bacillus, and microscopic slides showing the reaction in the peripheral blood stream.
- 2. Gross and microscopic specimens demonstrating the importance of an accurate microscopic diagnosis of tumors.

Department of Experimental Surgery:

Demonstration of a new plan of teaching Surgery to the Juniors by means of the laboratory method.

# Department of Anatomy:

- 1. Demonstrations of the cross sections of the formalin hardened cadaver.
- 2. Modern methods of teaching Embryology in the laboratory: the demonstration of dissections of embryos, microscopic sections, charts and models.

3. Demonstration of model of the human brain stem to show the position of the nuclei and origin and course of fibre tracts.

An especially interesting X-Ray Exhibit will be presented at this meeting; arrangements have been made for the presentation of interesting and unusual X-Ray plates and pathological specimens.

# Location of Hospitals.

.....4th St. and Reservoir Ave.

There will be a special Bulletin issued daily. Register your arrival immediately at the Information Bureau at the Hotel Wisconsin, and receive the Bulletins and such other information regarding the meeting as it is now possible to publish.

### MEDICO-LEGAL.

Mr. Kent has introduced the following bill; which was referred to the Committee on Interstate and Forcign Commerce and ordered to be printed.

Bill to standardize the treatment of tuberculosis in the United States, to provide Federal aid in caring for indigent tuberculous persons, and for other persons.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That within the appropriations made from time to time for such purposes the Secretary of the Treasury is hereby authorized to aid State authorities in providing care and treatment for indigent tuberculous persons who are citizens of the United States, but not legal residents of the States in which they are temporarily located, and for this purpose may designate such public or private hospitals and sanatoria as may be necessary. Prior to being designated to receive patients, and from time to time, said institutions shall be subject to inspection by officers of the Public Health Service in order to determine the facilities and methods available and in use for care and treatment of patients, and the Secretary of the Treasury is further authorized to prescribe standards to which institutions shall conform in order to obtain the benefits of this Act.

Sec. 2. That hospitals and sanatoria designated in accordance with the provisions of this Act shall be entitled to and may receive from the Federal Treasury a subvention fixed annually by the Secretary of the Treasury, but not exceeding 75 cents per diem for each indigent patient admitted with the approval of the Secretary of the Treasury: Provided, That the State in which

said indigent tuberculous patient is admitted to a hospital or sanatorium for treatment shall pay or cause to be paid a subvention, not less than that paid by the Federal Government, toward the cost of caring for such patient in said hospital or sanatorium. Subventions under this law will be granted only in the case of indigent patients who have submitted satisfactory evidence that they were not assisted by any person or institution to leave their legal residence or did not themselves leave in order to receive benefits under this Act.

Sec. 3. That the Secretary of the Treasury is authorized to issue regulations governing the designation of institutions and establishment of standards and for otherwise carrying out the provisions of this Act; and he is further authorized to collect and make available for general use information and descriptive matter relative to the construction, equipment, and maintenance of hospitals, sanatoria, and similar institutions.

Sec. 4. That detailed estimates of the sums required annually to carry out the provisions of this Act shall be submitted hereafter in the usual Book of Estimates.

#### MEDICO-LEGAL.

A Bill to establish a bureau for the study of the criminal, pauper, and defective classes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress Assembled, That there shall be established in the Department of the Interior a bureau for the study of the abnormal classes, and the work shall include both laboratory investigations and the collection of sociological and pathological data, especially such as may be found in institutions for the criminal, pauper, and defective classes. Said bureau and work shall be in charge of a director, who shall be appointed by the President, by and with the advice and consent of the Senate, and shall receive a salary of \$3,000 per annum. He shall make a report once a year, directed to the Secretary of the Interior, which, with the approval of that officer, shall be published. For the aid of the director there shall be one psychologist at \$2,000 per annum, one translator at \$1,400 per annum, two clerks at \$1,200 each, and one stenographer and typewriter at \$1,000.

Sec. 2. That the director, if necessary for the proper discharge of his duties, may place himself in communication with State and municipal and other officials of this and other countries.

Sec. 3. That for the proper equipment of and carrying on the work of said bureau, the temporary employment of specialists, and the purchase of instruments of precision, books, and periodicals, and rental of rooms, if necessary, there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of \$5,000 or so much thereof as may be required.

Dr. M. W. Alexander has written a very interesting paper on "The Physician in Industry." He says that the physician in industrial practice encounters a great many tasks and problems that do not arise ordinarily in private practice. He has to meet promptly problems dealing with masses of people. Many are ignorant, do not speak English. There are the dishonest ones, the malingerers, etc.

A preliminary meeting of physicians engaged in industrial practice, which was held in New York in April, 1914, resulted in the organization of a "Conference Board of Physicians in Industrial Practice."

"One of the first tasks assumed by the Board was the development of 'Instructions to Laymen for First Aid Treatment of Common Injuries and Disorders.' It was the intention to issue instructions of such simple character that they could readily be followed by the ordinary man without even an elementary foundation of first aid knowledge. The instructions agreed upon by the Board are concise and pertinent; they stipulate what the laymen should do, without wasting any words in stating the reasons for so doing. In an emergency treatment, loss of time by reading irrelevant matter may prove of serious consequence. The remedies referred to in the instructions are few, simple and inexpensive and can be administered by laymen without danger of any harm. All medicaments, bandages and other materials needed in carrying out the instructions, are readily obtainable in drug stores. The first aid instructions promulgated by the Board have been widely accepted; they have also been reprinted in numerous technical journals in the United States and in other countries.

The Board also co-operated in a very practical way with the Conference Board on Safety and Sanitation in the development of the 'N. A. S. O. Standard First Aid Jar,' a compact, sanitary and convenient first aid outfit consisting of a dust-proof glass jar in which first aid materials are contained in well ordered arrangement. The first aid instructions are printed on the inside of the glass jar cover and are therefore always at hand when needed. These first aid jars have been made readily available to employers and are now being used extensively in industrial establishments, in public institutions and private homes.

"The next work of importance undertaken by the Board was the determination of the essential requirements of 'Physical Examination' in industry generally. This subject was given careful study with a view of arriving at a standard of minimum requirements and records which could be used in connection with practically all employments, or with such additions as the nature of a special employment would necessitate. The conclusions reached were based on extensive observation and experience in industry, through which it had been learned what physical ailments and what degree of such ailments would interfere with the well-being, efficiency and safety of the employes at work. The Board agreed upon the various defects requiring attention in physical examinations, and the various degrees of such defects, on the basis of which the suitability of an individual for a specific employment can be determined. The Board also standardized a 'Physical Examination Record Card'

of convenient size and so arranged that a sufficiently clear and comprehensive record can be made with a minimum amount of clerical work. These record cards have already been used in thousands of cases with entire satisfaction.

"The Board gave special attention to methods of 'Artificial Respiration' of persons rendered unconscious by electric shock or by asphyxiation from water, smoke or gas. The Board expressed itself unanimously in favor of the manual prone pressure method by persons specially instructed therein, but it also agreed that when mechanical devices for artificial respiration are used they should be used principally as auxiliary means and then only by specially instructed laymen or physicians.

"Realizing that all efforts for sanitary conditions in workshops and for clean personal habits of persons while at work would be brought to naught if the persons themselves would not make similar efforts in respect to their homes and their personal habits outside the workshop, the Board decided to prepare a set of 'Health Hints' of prophylactic character, written in simple, concise and direct language, so that they can be readily understood by the average person. The Care of the Teeth, the Care of the Eves, the Healing of Wounds, the Value of Proper Breathing, the Danger of Promiscuous Spitting, the Cause of Headache and of Kidney Trouble; these are some of the subjects on which the Board has prepared statements which are intended to be printed, each on a separate leastet, for wide distribution among employes generally.

"The Conference Board has also entered into a careful study of diseases peculiar to certain occupations, with a view of learning the most effective treatment of such diseases and the best methods of reducing or entirely climinating their causes. Some members of the Board who are connected with industrial establishments in which the nature of the work or the materials used are apt to cause such diseases, have become experts by special study and extended experience in this field of medical practice. With their assistance and with the help of other invited experts in this field the Board is proceeding cautiously and painstakingly in the study of 'Occupational Diseases.' and expects in due time, to arrive at and publish definite conclusions.

"Another important phase of the work of the Board is the exchange of specific experiences by the members as they encounter special situations in industry, or as they come in practical contact with the administration of workmen's compensation laws. Many of the corporations represented on the Board through their respective medical officers are operating in several states and are therefore subject to more or less widely differing workmen's compensation laws and health regulations. The necessity for uniformity in statutory provisions and in their interpretation has therefore been pertinently brought home to the Board and has convinced it of the desirability and need of a standardized nomenclature and definition of medical terms as they relate to industrial work. The Board realizes that progress along these lines will be slow, but it believes that substantial progress can be made by thorough investigation along broad lines and by close application to the task,

"The Conference Board of Physicians in Industrial Practice is unique in character and in method of work. It is a voluntary association of a small number of men engaged in the same field of professional work, who meet in periodic conferences of the most informal character, unfettered by any restricting rules and regulations or by any obligation to abide in their individual work by the cone'usions of the Board. Yet the common purpose which brings these physicians together and the absence of such restrictive regulations, has resulted in a most helpful co-operative effort. The work of the Board members, while strictly governed by professional ethics and scientific principles, is given a most pronounced practical aspect from the fact that these physicians in industry have acquired by the nature of their work an industrial viewpoint and understanding that establishes the proper balance between what should be abstractly striven for and what can be concretely accomplished under actual working conditions."

The question of where the physician in industry should terminate his care of injured or sick employes and at what point an employe's private physician should assume such responsibility, is another problem that must be solved in a satisfactory way. What duties to delegate or not to delegate to the nurse employed in the establishment under his supervision; what instructions to give and what materials to furnish to laymen authorized to render first aid or emergency treatment to injured employes throughout the plant; how best to render some industrial operations free from the hazard of occupational disease, or how to protect workmen against such hazards if they eannot be eliminated, are questions that he is called on to answer in an intelligent and practical manner.-Dr. M. W. Alexander, "The Physician in Industry."

# **BOOK REVIEWS**

AN AUTOBIOGRAPHY. By Edward Livingston Trudeau, M. D. Octavo, 322 pages. Illustrated. Cloth, \$2.00. Lea & Febiger.

The pioneer in any line has a rough road to travel and rarely lives to see his work on more than a very insecure foundation. So true is this that we are always more than surprised when we meet with a pioneer who has fought and won in his lifetime.

We are led to this brief introduction after reading the truly remarkable autobiography of the late Dr. Trudeau. If ever there were a pioneer it was he. And to blaze a trail, then smooth the path, then make the broad road while most of the time ill himself, seems almost incredible. Can it be true that this is the man who in 1873 went to seek health, an advanced case of pulmonary tuberculosis, in the Adirondack wilds, and for forty-three years time and again was laid low for weeks by illness, yet left such a monument behind him and completely revolutionized the treatment of tuberculosis? Can it be true that this man who had to learn how to stain the tubercle bacillus, yet with the courage and enthusiasm of a Pasteur, actually grew the tubercle bacillus in pure culture in a home-made thermostat and then

performed epoch-making experiments with it? No such stimulating and absorbing book has come to the Reviewer in many years. It is a story told in purest English of the struggles and accomplishments of a great man. For Dr. Trudeau was great in the largest sense of the word. There are no dull passages. How could there be when the life he is telling about was so active and helpful? Vivid descriptions, humor, the deepest pathos are all here and through all an almost flambouyant note of optimism. He says of himself that he was ever an optimist and truly his life bears this out. Had he not been ever hopeful he never would have surmounted the obstacles which beset him, chief of which were his frequent periods of severe illness.

One can see the great physician all through the book. Sorrow only tempered his already fine nature to make it finer. All who knew him loved him. When one reads his own story it is easy to understand why this was so.

One quotation must be given. It sums up his philosophy of life and bears a lesson to us all. "From these (his patients) I have learned that the conquest of Fate is not by struggling against it; not by trying to escape from it, but by acquiescense; that it is often through men that we come to know God; that spiritual courage is of a higher type than physical courage; and that it takes a higher type of courage to fight bravely a losing than a winning fight, especially if the struggle from the first is evidently a hopeless one, and is protracted for years."

Will anyone deny that he had that higher courage? Trudeau is dead but Trudean cannot die. He lives and will live from age to age in the only immortality which is really worth while, namely, that which is in the hearts of an ever-widening circle of loyal devotees to his memory.

A Manual of Diseases of Infants and Children. By John Ruhrah, M. D., Professor of Diseases of Children. College of Physicians and Surgeons, Baltimore, Md. Fourth edition, thoroughly revised. 12mo volume of 552 pages, 175 illustrations. W. B. Saunders Company, Philadelphia and London, 1915. Cloth, \$2.50 net.

The Manual of Discases of Infants and Children which Dr. Ruhrah has prepared has met with a cordial reception and the issuing of a fourth edition has enabled the author to make numerous minor changes and additions. A work of this character is of necessity condensed in its treatment of every phase of the subject and the author has been able to give a survey of a large amount of territory within the limits of a small volume.

Dr. Ruhrah is conservative in all his views; in fact the reviewer would be inclined to consider some of the positions he holds no longer justifiable. For instance in regard to the prevention of gonorrheal ophthalmia not many will agree that it is safe to teach that "when the mother is free from any suspicious discharge a solution of boric acid (10 gr. to 1 oz.) may be substituted" for nitrate of silver solution. Nor ought the recommendation to go unchallenged that in the beginning of an attack of appendicitis castor oil should be given together with an opiate for the pain. And in the section on

amebic colitis it is to be regretted that no mention is made of emetine.

For the student who is preparing for an examination on the subject this little volume will be very useful in helping him to review a large subject in a short time, but it can never take the place of the more complete works on the subject which should be found in the library of every practicing physician.

A. W. M.

Obstetrics. A Practical Text Book for Students and Practitioners. By Edwin Bradford Cragin, A. B., A. M., (Hon.) M. D., F. R. C. S.; Professor of Obstetrics and Gynecology, College of Physicians and Surgeons, Columbia University, New York; Attending Obstetrician and Gynecologist to the Sloane Hospital for Women; Consulting Obstetrician to the City Maternity Hospital. Assisted by George H. Ryder, A. B., M. D., Instructor in Gynecology, College of Physicians and Surgeons, Columbia University, New York; Assistant Attending Obstetrician, Sloane Hospital for Women; Associate Surgeon. Woman's Hospital, New York. Octavo, 858 pages, with 499 engravings and 13 plates. Cloth, \$6.00 net.

By reason of a wide clinical experience as medical head of the Sloane Hospital for Women, Dr. Cragin has written a book that is not only authoritative but reasonably complete and modern. Throughout, the author's precision of diction, which is clear, definite and concise, brings within easy reach of the reader a comprehensive understanding of a work that is systematic in arrangement and accurate in statement. The text, so profusely and splendidly illustrated, has features quite in common with an atlas and the insertion of numerous tables for differential diagnosis is a plan that is highly commendable.

In the chapters devoted to the management of a normal pregnancy and its subsequent labor, consideration is given to subjects which have been the objects of much recent investigation, such as blood pressure, twilight sleep and nitrous oxide anesthesia in their respective fields of application and while much in advance of what is commonly found in works on obstetrics, considerable collateral reading may still advisedly be done on those important subjects. By indicating their significance the chapters including them are made unusually thorough, while, in addition, the pages devoted to pathological and surgical obstetrics are likewise exceptionally complete.

We feel that we can highly recommend this book to the profession.

SEXUAL IMPOTENCE. By Victor G. Vecki, M. D., Consulting Genito-Urinary Surgeon to the Mt. Zion Hospital, San Francisco. Fifth edition, enlarged. 12mo of 405 pages. W. B. Saunders Company, Philadelphia and London, 1915. Cloth, \$2.25, net.

The fifth edition of Dr. Vecki's book contains some new material. He is very insistent on correct diagnosis after thorough and painstaking examination before treatment is instituted.

To those who wish to read a book on the subject we feel that this will fill the bill. The book has evidently made a place for itself otherwise it would not have gone through so many editions.

# The Wisconsin Medical Journal

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Number 12

# ORIGINAL ARTICLES

CHRONIC MOUTH INFECTION IN RELA-TION TO SYSTEMIC DISEASE.\*

BY ROBERT H. IVY, M. D., D. D. S.,

MILWAUKEE.

It has been well established particularly through the work of Billings, Rosenow, and their associates, that certain chronic foci of streptococcal infection in different parts of the body have a definite etiological relationship to disease of various organs through metastasis via the circulation. One of the most frequent seats of these foci is the mouth, though by no means the only one, other important places in this respect being the tonsils, nasal accessory sinuses, gall-bladder, appendix, and Fallopian tubes.

I shall endeavor to present the manner in which diseased teeth and their appendages may become important factors in systemic infection, touching only as much as is absolutely necessary upon technical dental points.

There may be said to be two ordinary forms of mouth infection which may produce metastases in other parts of the body.

- (1) Periapical dental infection.
- (2) Chronic suppurative pericementitis or pyorrhea alveolaris.

Owing to limitations in space, the first of these only will receive consideration.

By periapical dental infection is meant infection of the pericementum and other tissues immediately outside the apical foramen at the end of the root of a tooth. This is brought about in one of two ways.

(a) In the vast majority of cases the disease results from infection following death of the dental pulp, the micro-organisms passing up the root canal

\*Read before the Milwaukee Medical Society, Jan. 25, 1916.

and gaining access to the periapical tissues through the apical foramen of the tooth.

(b) Bacteria may also be carried by the blood stream from other parts of the body and lodge in the periapical tissues of pulpless or devitalized teeth. Ulrich (Jour. A. M. A., Nov. 6, 1915) is inclined to the belief that the great majority of periapical infections occur in this way, i. e., the dental lesions are secondary and not the primary foci of entrance. We believe that the reverse is true, i. e., that in most cases the periapical infection is introduced via the root canal rather than through the blood stream.

In practically all cases of chronic periapical disease whether it follows dental caries and death of the pulp of the tooth, traumatism, or artificial devitalization by the dentist, the infection is streptococcal. These findings indicate that the periapical tissues have a special affinity or afford particularly favorable opportunities for the growth of streptococci. In carrying out root canal operations nearly all dentists fail to observe absolute asepsis in every particular. For example, many touch the cotton, filling materials, etc., with the fingers, even when they take the precaution to sterilize these materials before use. By these and other apparently unimportant breaks in the aseptic technique, streptococci may be introduced from the mouth surface into the tissues so ready to receive them, even if they be not already present in the root canal. In view of these considerations, it seems unnecessary to seek further for the principal mode of access of the infection to the periapical tissues. On the other hand, one is impressed with the rarity of apical disease in teeth which have good root canal fillings, especially when the teeth have been filled with all aseptic precautions.

Areas of periapical dental infection may be closed to the mouth surface or open. In relation to systemic disease the closed areas are of greater importance than those draining into the mouth through sinuses, for the former supply micro-organisms and their toxins to the system directly through the blood stream. A mouth which pre-

sents to inspection many discharging sinuses and other visible evidence of suppuration may be much less of a menace to the general health than one apparently normal on inspection, but which contains several closed areas of apical disease demonstrable only by the X-ray. Furthermore, these chronic infective foci very seldom give rise to any subjective symptoms which the patient can attribute to dental trouble, such as local pain, etc.

#### INFECTION.

The access of streptococci to the peridental membrane of the apical region in the manner previously indicated, first of all causes thickening of this

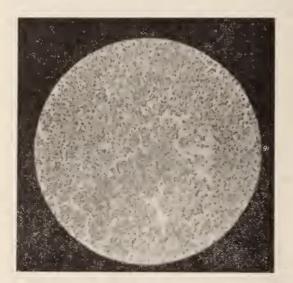


Fig. 1. Granulation tissue about root apex. Subacute stage. Infiltration largely of Polymorphonuclear cells.

tissue, by attracting various blood elements, but especially small, round, and polymorphonuclear The process may or may not proceed to acute abscess formation. If this occurs, the condition may rapidly subside with practically no detachment or destruction of the peridental membrane, and with proper measures to prevent reinfection, a return to normal may take place. On the other hand, what usually follows, and just as frequently without subjective or objective symptoms as with them, is the slow detachment and destruction of the peridental membrane covering the cementum at the root end, thus depriving the latter of its blood supply, and converting it into a nccrotic foreign body. The immediately surrounding bone becomes absorbed, forming a space which

may be filled with fluid pus (blind abscess), or may contain a mass of semi-organized granulation tissue consisting of small round cells, polymorphonuclear and endothelial leukocytes, foreign body giant cells, fibroblasts, capillaries and fibrous tissue, the so-called granuloma. (Figs. 1 and 2.) From the abscess fluid and also the granulation tissue, streptococci may be obtained both by direct smear and by culture. Histological study of the granulomas sometimes reveals masses of epithelial cells running in various directions. (Fig. 3.) The origin of these epithelial cells will be discussed in the consideration of dental cysts, which form a later stage of the process.

#### ROOT ABSORPTION AND HYPERPLASIA.

Coincident with the abscess or granuloma formation. rarefaction and absorption of the necrotic cementum of the root apex take place by the action of endothelial leukocytes and foreign body giant cells. This is usually accompanied by production of new cementum by cementoblasts that have not been destroyed, forming irregular thickenings of the roots. Sometimes, where the infection is not sufficiently virulent to destroy the apical peridental membrane, it suffices to stimulate the hypercementosis so that the latter is the principal lesion found.

The contents of the spaces produced by bone absorption about necrotic root apices, including bacteria and their products, have direct connection with the general circulation through capillary blood vessels and lymphatics in the walls of the cavities and running in all directions through the granulation tissue. Such areas have no limiting membrane in a pathological sense.

#### CYST FORMATION.

Among the connective tissue elements of the inflammatory granuloma developing as the result of infection about the root apex, are frequently found masses of epithelial cells. Similar cells are present normally in the peridental membrane, where they are known as the epithelial sheath of Hertwig, or débris epithéliaux paradentaires of Malassez. These cells are believed to be remains of the outer cells of the enamel organ which originally passed down and merged with the sac in which the cementum of the root was formed. Proliferation of these epithelial cells found among the granulation tissue is stimulated by the chronic inflammatory process.

The mass of epithelium then breaks down in the center, it is believed by fatty degeneration, and a space is formed containing fluid. (Fig. 4.) This cyst cavity gradually enlarges, the pressure of the fluid causing atrophy of the epithelial cells, until finally the wall of the cyst consists of a dense fibrous capsule lined with a single layer of epithelial cells. The cyst fluid is usually clear, strawcolored, and may contain cholesterin crystals. It is generally sterile, but infection of the cyst wall may convert the fluid into pus from which various organisms may be recovered. Dental root cysts may vary considerably in size, from that of a small pea to a hen's egg. In the maxilla they may invade the maxillary sinus or nasal fossa. It is not definitely established, but is probable, that certain forms of carcinoma developing within the maxillary bones may have their origin in these cysts.



Fig. 2. Granulation tissue about root apex. More chronic stage. Small round and endothelial cell infiltration.

Note blood vessels.

The bacteriology of periapical infection may now be regarded as definitely established. Practically all observers agree that the responsible micro-organisms in these cases belong to the streptococcus group. Especial credit along these lines is due to Rosenow (Jour. Infect. Dis., Jan., 1914), Gilmer and Moody (Jour. A. M. A., Dec. 5, 1914), Hartzell and Henrici (Jour. A. M. A., Mar. 27, 1915), Ulrich (Jour. A. M. A., Nov. 6, 1915), and others.

Especially noteworthy is the work of Rosenow in demonstrating the transmutability of members of the pneumococcus-streptococcus group with varying oxygen tension and under other conditions. All, too, are doubtless familiar with his experimental production, almost at will, of certain selective lesions in animals with given strains of streptococci obtained from mouth foci.

Our personal observations serve but to confirm the findings of the workers mentioned, and require no further detailed report. In the great majority of cases cultured after extraction or root resection for chronic apical disease, we have been able to obtain a streptococcus, generally S. viridans. Accompanying this we have at times obtained M. aureus, M. albus, or M. catarrhalis, and rarely one of these latter alone without the streptococcus. Smears made by rubbing the granulation tissue upon slides, show streptococci with great uniformity.

It is sometimes denied that the periapical areas demonstrated by the X-ray are infective in the absence of pain and other symptoms, and that they merely show the result of previously existing disease. In view of the uniform pathological and bacteriological findings of these tissues after removal, such statements should receive no consideration.

Time limitation prevents us from a consideration of pyorrhea. Another source of chronic mouth infection deserves brief mention, viz., what we may term

### PERICORONAL SUPPURATION.

By pericoronal suppuration is meant the pus formation frequently seen resulting from infection in the pocket formed by the flap of gum partly covering the crown of the lower third molar. This may occur in cases where the tooth is fully erupted through the bone, but where its crown is not entirely exposed. The decomposition of food lodging in this pocket and subsequent bacterial infection often result in ulceration of the mucous membrane lining the pocket followed by abscess formation. The process may be acute or chronic. In the chronic form there may be acute exacerbations with pain and swelling in the affected region and inability to open the mouth. The submaxillary lymph nodes may become involved, suppuration occasionally ensuing. In chronic pericoronal infection these lymph glands are often palpable. Chronic pericoronal infection frequently constitutes a focus to be considered as an etiological factor in systemic disease. A very close association also exists between infections about the lower third molar and tonsillar and peritonsillar infections. The infection may pass from one to the other by direct surface extension, by tissue continuity, or through the lymph stream, and recurrent attacks of tonsillitis and pharyngitis may cease entirely after removal of the pericoronal focus. The infection about the third molar may not be limited to the soft tissues about the crown of the tooth, but may pass down and involve the peridental membrane and surrounding bone.

In addition to the symptoms and clinical signs of inflammation in the involved region, the X-ray may show an area of bone absorption posterior to the crown of the tooth, the alveolar process about the roots being apparently unaffected.

We may sum up the evidence as follows, to sup-



Fig. 3. Mass of epithelial cells embedded in granulation tissue about root apex.

port the view that foci of infection in the mouth at times play an important etiological rôle in certain systemic diseases:

- (1) Streptococci can nearly always be demonstrated if proper technique be used, in closed areas of chronic periapical infection.
- (2) These areas, as demonstrated by histological sections, have a direct connection with the blood and lymph streams, through which the infection may reach other parts of the body.
- (3) Rosenow has been able to produce in animals with streptococci isolated from mouth foci the same systemic lesion as was present in the patient.

(4) Marked improvement or even disappearance of the particular systemic condition affecting the patient frequently follows removal of sources of chronic streptococcal infection in the mouth.

Among the most frequent conditions associated with mouth infection, and in which in our opinion treatment should not be undertaken without elimination of mouth foci if present, may be mentioned, secondary anaemia, various forms of acute and chronic arthritis, neuritis, myositis, gastric ulcer, endocarditis, exophthalmic goitre, cholecystitis, diabetes mellitus, iritis and other eye lesions.

#### ROUTINE EXAMINATION.

In cases referred to us for examination where it is suspected that mouth foci may play a part in the causation of the systemic condition, the following routine is carried out:

- (a) General survey of the mouth and associated parts.
- (b) Determination of response of each tooth to the Faradic current.
- (c) Roentgenologic examination, consisting of a plate of each side, with films of teeth not responding to the current, crowned teeth, and any areas requiring special study as indicated by the plates.
- (d) If pyorrhea alveolaris is present, microscopical examination of the pus for Endamoeba gingivalis.
- (a) A general survey is made of the mouth: Pyorrhea, ulcerations, swellings, sinuses, or other abnormalities are noted, also any peculiarities or points of interest regarding any condition present. Careful palpation is made to determine the presence of enlargements of the sub-maxillary lymph nodes.

# (b) ELECTRIC EXAMINATION.

Starting at the median line in the maxilla, each tooth in the mouth in succession is touched with the electrode from a Faradic battery and its response or non-response noted, as minus, plus, or doubtful. Crowned teeth are marked C, and missing teeth M. It is especially important to tabulate any missing teeth, third molars in particular. This

chart then forms the basis of our Roentgenological examinations, which should be made therefore in all cases showing devitalized, crowned, and missing teeth.

# (c) ROENTGENOLOGICAL EXAMINATION.

If the previous examination reveals devitalized, crowned, or missing teeth, an X-ray plate is taken of each side of the upper and lower jaws in order to give a general survey of the teeth and to reveal any unsuspected abnormalities not pointed to by the first part of the examination. Each single area, comprising teeth either crowned or negative to the electric current is then covered with an intra-oral film. By this combination of films and plates no unsuspected conditions are missed.



Fig. 4. Wall of dental cyst, showing lining of several layers of epithelial cells.

### INTERPRETATION OF FINDINGS.

In reporting roentgenological findings of apical conditions it is as a rule justifiable only to state in any given case whether the condition shown is normal, probably normal, probably abnormal, or definitely abnormal. We are not warranted on roentgenological findings alone, in hazarding a diagnosis of the actual pathological condition present in the tissues hidden from view. Even with the aid of clinical examination, history, and symptoms, it is seldom that we can say definitely what the abnormal shadow represents. An area of lessened density around the apex of a tooth root permitting the rays to penetrate, means that bone alteration has taken place, but the picture does not

tell us whether the cavity formed is an abscess containing pus; is filled with chronic inflammatory granulation tissue; or is a cyst. We must always remember that roentgenograms are but macroseopical not microseopical pictures. Areas of different degrees of density are shown as such, with no proof however, that the structure so pictured has any specific content. (Fig. 6.) The size of an area of suspected abnormality has no relation to its character or pathogenicity. The actual presence of pus need not always be looked for. Absence of an abnormal roentgenographic area does not necessarily mean that the tissue is non-pathologic. Our interpretation must also be dependent upon other conditions; for example, in a patient referred with practically all foci but those of the mouth eliminated, even the tonsils removed by operation, sinuses negative, in fact only the dental organs under suspicion, a more radical interpretation of suspected teeth should be made than in ordinary cases. Then again in cases that are not urgent and time can be consumed in observation, interpretation and consequent operative procedures on less obvious areas may be delayed to await results from the surgical treatment of other areas found indisputably diseased.

#### TREATMENT.

We are concerned here only with patients who have some systemic condition in which mouth infection is possibly playing a part, and our attitude toward treatment of suspected diseased teeth in such cases may be much more radical than that adopted in patients having no physical ailments and who come merely to have the mouth put in a healthy condition. Many times we pass a suspected tooth along for treatment in a healthy individual where in an invalid a tooth so affected would be removed without hesitation.

We believe that in cases of certain forms of systemic disease, where there is roentgenogramic demonstration of areas of apical bone rarefaction or of root denudation, temporizing with conservative dental treatment is unjustifiable, if the best interests of the patient are to be served, and that rapid surgical removal of the diseased tooth tissue with eradication of the affected periapical areas is indicated. Post operative cultures and other pathologic studies of such areas shown to be abnormal

by the X-ray, have fully confirmed this view. So far, no reliable or satisfactory pathological means of proving the pathogenicity of these areas prior to operation, has been devised, so that at present we must take the risk of occasionally sacrificing a harmless tooth, which is a small matter when weighed in the balance against the general health of the individual.

In the eradication of apical disease foci, one of two methods is resorted to, according to the amount of root denuded of its membrane, and according to the location of the focus. tion in deciding which foci to remove first, whether to perform the operations in the office, at home, or in the hospital, and how many diseased teeth to remove at one time.

The practice of anesthetizing a patient and rapidly extracting eight or ten or more diseased teeth, in the office, without preparation or without previously ascertaining the presence of any systemic complications, has resulted, we are convinced, in very serious aggravation of constitutional disease and has even proved immediately or eventually fatal. This may be questioned by those who are

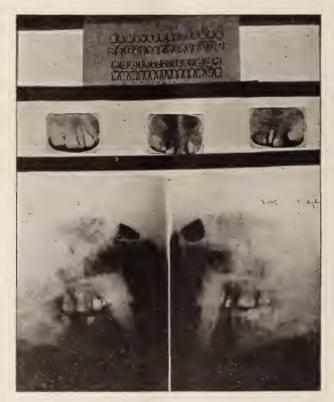


Fig. 5. Illustrating results of electrical and Roentgenological examination of teeth. Plate of each side, with films of regions of devitalized, crowned or missing

These methods are tooth extraction, and resection of the root apex with curettement of the diseased area. Where the systemic condition demands immediate removal of all possible sources of infection in the mouth, extraction is indicated in the case of all teeth showing apical disease. In less urgent cases, we have the choice between extraction and resection, being governed by the location of the tooth, the amount of tissue destroyed, and other factors. The gravity of the systemic condition present must always be taken into considera-

engaged in the specialty of tooth extraction. The majority of patients coming to extraction specialists are in good health. The others leave the office immediately, and any ill effects are treated by the physician, who may or may not see the connection between the dental operation and the constitutional reaction, as the latter may be delayed for 48 hours.

By opening up too many infective foci at one time, the circulation may be flooded with the bacteria and toxins absorbed, producing marked exacerbation of the constitutional symptoms. For example, in a patient having a quiescent gastric ulcer, the ill-advised extraction of many infected teeth may set up an acute attack of stomach symptoms. Even after removal of only one focus, we frequently see a reaction in the form of temporary aggravation of the systemic trouble.

In view of the foregoing, we have adopted the custom in all cases of systemic involvement excepting the most trivial, of eradicating the mouth foci either at the patient's home or in the hospital, where perfect quiet, or if necessary, rest in bed for 24 hours afterward may be secured. As a rule, also, we do not remove more than two or three teeth at one time, allowing a day and sometimes longer to intervene between the several operations until the mouth foci are cleared up. These

#### THE RESULTS.

In any given case it is impossible to determine from examination of the mouth of the patient, how much the infective foci found there are responsible for the systemic disease present, or ever to say definitely that they are causing the condition. We are never justified in promising the patient that removal of mouth foci will result in a cure of the ailment from which he is suffering. We can, however, say to these patients when mouth infection is found, that it should be eradicated whether or not it has any bearing upon the systemic condition, and that very often improvement in the latter will result. We can confidently state that post-operatively the connection is frequently established. The



Fig. 6, (a) Rarefaction due to collection of pus.
(b) Rarefaction due to granuloma.
(c) Rarefaction due to dental cyst containing clear fluid.

operations are performed under either infiltration or nerve-blocking anesthesia with novocain-adrenalin, preceded where advisable, by a sedative hypodermic injection. The local anesthesia permits proper curettement of diseased tissue from rarefied bone areas and due surgical attention to the wound such as removal of portions of alveolar process, suturing of mucous membrane flaps, etc.

It is our practice to operate progressively, i. c., to extract first, definitely diseased teeth, or perform resection upon these; next, to eliminate those probably diseased, and finally to remove those about which there is a greater element of doubt, basing our judgment upon the improvement or otherwise of the systemic condition.

At the time of eradication of foci we usually make cultures, observing a technique which eliminates as far as practicable, the possibility of eon-tamination, in order to determine the infecting organism and also to afford material for the autogenous vaccine if advisable.

accompanying table is an attempt to present in concise form the data of some of our cases. In most of them, elimination of the dental foci constituted a large part of the treatment. It is obviously very difficult to express in a table of this kind the actual amount of benefit derived from the removal of dental foci, where we are unable to go into the fullest details of every ease and where perhaps other measures have also been carried out. So we have merely indicated by the word "improved," whether in our opinion, or that of the physician referring the patient, beneficial results have been obtained by our treatment. The improvement noted may have been moderate, marked, or may mean complete freedom from symptoms of systemic infection.

This table is intended not to represent a close statistical study, but to give an idea in concise form of the type of cases we have been dealing with. We wish to express our sincere thanks to those by whom the patients were referred.

NO.	SEX	AGE APPROX.	SYSTEMIC CONDITION	MOUTH CONDITION	TREATMENT	CULTURE	RESULT
1	17	30	Neuritis	2 Apically diseased teeth	Extraction 2 teeth	Str. viridans	Marked
2	F	35	Neuritis, anemia		Extraction 4 teeth	None made	improvement 1mproved
3	F	50	Neuritis		Extraction 1 tooth	Str. viridans	Marked improvement
4	F	40	Neuritis		Emetine and Scaling, extraction 1 tooth	Str. viridans	Improved
5	F	35	Neuritis	Pyorrhea, Enda- moeba present, 1 apically diseased tooth	Emetine, extraction 1 tooth	Str. viridans	1mproved
6	F	45	Myositis	2 Apically diseased teeth	Resection 1 tooth, extraction 1 tooth	None made	lmproved
7	F	23	Myositis, headaches	6 Apically diseased teeth	Extraction 6 teeth	None made	Marked improvement
8	F	35	Myositis	Pyorrhea, Enda- moeba present, 1 apically diseased tooth	Emetine and Scaling, extraction 1 tooth	Str. viridans	1mproved
9	F	30	Myositis, toxaemia	4 Apically diseased teeth	Extraction 4 teeth	None made	Slight improvement
10	F	25	Arthritis Deformans	8 Apically diseased teeth	Extraction 8 tceth	Str. hemolyt	lmproved
11	F	75	Arthritis Deformans	Pyorrhea, Enda- moeba present	Emetine, extraction 7 teeth	None made	lmproved
12	F	65	Arthritis Deformans	Pyorrhea, Enda- moeba present, 4 apically diseased teeth	Emetine and Scaling, extraction 4 teeth		No data
13	F	45	Arthritis Deformans	Pyorrhea, Enda- moeba present, 4 apically diseased teeth	Emetine and Scaling, extraction 3 teeth, resection 1 tooth	None made	Marked improvement
14	F	55	Arthritis Deformans	Pyorrhea, Enda- moeba present, 2 apically diseased teeth	Emetine and Scaling, extraction 2	None made	lmproved
15	F	50	Arthritis Deformans	Pyorrhea, Enda- moeba present, 2 apically diseased teeth	Emetine and Scal- ing, extraction 2 teeth	Str. viridans	Too soon to judge
16	F	70	Chronic Synovitis, Headaches	Pyorrhea, Enda- moeba present	Extraction 9 teeth	None made	1mproved
17	М	40	Subacute Arthritis Ankles	Pyorrhea, Enda- moeba present, 1 apically diseased tooth	Extraction 1 tooth	Str. viridans	No data
18	F	35	Goitre, exophthalmic	1 Apically diseased tooth	Extraction 1 tooth	Str. viridans	1mproved
19	F	28	Hyperthyroidism	Pyorrhea, Enda- moeba present, 2 apically diseased teeth	Emetine and Scaling, extraction 2 teeth	M. Aureus	lmproved
20	F	50	Goitre. exophthalmic	5 Apically diseased teeth	Extraction 5 teeth	None made	1mproved

No.	SEX	AGE APPROX.	SYSTEMIC CONDITION	MOUTH CONDITION	TREATMENT	CULTURE	RESULT
21	F-	38	Goitre, exophthalmic	2 Apically diseased teeth	Extraction 2 teeth	None made	Improved
22	F	35	Hyperthyroidism, Pulmonary Tuberculosis	-	Emetine and Scalling, extraction 2 teeth	None made	No improvement
23	F	25	Nephritis, albuminuric retinitis	3 Apically diseased teeth	Extraction 3 teeth §	Str. Hemolyticus also in blood culture	•
24	F	70	Nephritis, glaucoma	4 Apically diseased teeth	Extraction 4 teeth	M. Aureus	General condition improved, Eye condition not benefited
25	F	40	Nephritis, Pernicious vomiting of pregnacy, Acute yellow Atrophy of liver	moeba present, 8 apically diseased teeth		Str. viridans	Marked improve- ment
26	М	45	Severe headaches	Pyorrhea, Enda- moeba present, 1 apically diseased tooth		Str. viridans	No data
27	F	21	High blood pressure, headaches	Pyorrhea, Enda- moeba present, 2 apically diseased teeth		Str. hemolyticus	No data
28	F	55	High blood pressure, headaches	Pyorrhea, Enda- moeba present, 2 apically diseased teeth	_	None made	Mnch improved, blood pressure normal
29	F	30	Anaemia	2 Apically diseased teeth	Extraction 2 teeth	None made	Improved
30	F	35	Indigestion, anaemia		Emetine and Scal- ing. extraction 4 teeth	None made	Much improved
31	F	30	Indigestion	4 Apically diseased teeth	Extraction 3 teeth, resection 1 tooth	None made	Improved
32	F	35	Persistent vomiting several years	Pyorrhea, Enda- moeba present	Emetine and Scal-	None made	Much improved
33	F	55		Pyorrhea, Enda- moeba present, 4 apically diseased teeth	~	Nonc made	Much improved
34	М	45	Indigestion, vertigo	2 Apically diseased teeth, septic bridge work	Extraction 2 teeth, removal of bridges	None made	Much improved
35	М	36	Acute toxaemia re- sembling typhoid	2 Apically diseased	Extraction 2 teeth	M. Aureus	Much improved
36	F	25			extraction 1		lmproved
37	М	35	Indigestion, nervousness	Pyorrhea, Enda- moeba present, l apically diseased tooth	Emetine and Scal-1 ing, extraction 1 tooth	None made	Improved

		AGE	SYSTEMIC	MOUTH	TREATMENT	
No. 38	SEX F	APPROX.	CONDITION Gastric Ulcer		Emetine and Seal-None made ing, extraction 4 teeth	RESULT Improved
39	F	40	Gastric Ulcer		Emetine and Scal-M. aurcus ing, extraction 5 teeth, Cystectomy	Much improved
40	F	42	Urticaria		Emetine and Scal-Str. viridans irg, extraction 5 teeth	Improved
41	F	35	Endocarditis	3 Apically diseased teeth	Extraction 3 teeth M. albus	No improvement
42	F	35	Cardiac hypertrophy	Pyorrhea, Enda- moeba present, apical disease, 4 teeth		No improvement
43	M	60	Paresis of arm and leg	Pyorrhea, Enda- moeba present, apical disease, 1 tooth	Emetine and Scal-Str. viridans ing. extraction 1 tooth	Subjective improvement
44	M	23	Epilepsy	l Apically diseased tooth	Extraction 1 tooth Str. viridans	Unimproved
45	M	21	Diabetes	6 Apically diseased teeth	Extraction 4 teeth, Str. viridans resection 2 teeth	Too early to judge
46	M	22	Corneal ulcer	Apical disease and extensive caries, 5 teeth	Extraction 5 teeth M. aureus and albus	Improved
47	F	50	Eczema of face Neuralgia	Pericoronal infec- tion, 3rd molar	Extraction 1 tooth None made	Much improved
		35	Indigestion Headaches			l mproved

#### HISTORY OF BILL ON CRIMINOLOGY.

The Bill on Criminology (S. 4990 and H. R. 8820) has been introduced in the present Congress by Hon. Joseph T. Robinson of the Senate, and Hon. Joseph Taggert of the House. It is one of the oldest bills in Congress. It has been reported favorably by the Judiciary Committees of both Houses twice. It has failed to become law mainly through unintentional delay.

The Bill has been endorsed by the principal Representatives of the legal and medical professions of this country, including the American Bar Association and six National and twenty-five State medical societies; it has also been recommended by many religious associations of different demoninations, including twenty-five Presbyteries. It also has the endorsement of the Congress of Criminal Anthropology in Europe. No bill ever in Congress has had such endorsement. The plan of work in bill was presented to Russia and Belgium, and adopted by both countries. Many other foreign nations are doing scientific work in criminology.

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#### WASSERMANN TESTS AND CEREBRO-SPINAL FLUID EXAMINATIONS FREE OF CHARGE.\*

BY W. F. LORENZ, M. D.,

MENDOTA.

During the latter part of the last legislative session, a law was passed, which should be of interest to every practicing physician of the State. It concerns the making of Wassermann tests and cerebrospinal fluid examinations free of charge.

In March of this year a communication appeared in your State Medical Journal, requesting criticisms, suggestions, and opinions concerning the advisability of making Wassermann tests for the physicians of the State at a nominal fee. Many replies were received in response to this suggested plan. Without exception, these were favorable. A number of County Medical Societies went on record favoring this plan while some were of the opinion that these tests should be made by the State without charge. Later, when our Laboratory equipment and other facilities made the handling of a large number of these tests possible, it became apparent that even a charge of \$1.50 was excessive. At about this time the Visiting Committee of the Legislature made their tour of in-They were greatly interested in this proposition but were also of the opinion that the tests should be made free of charge. This plan met with the approval of the Board of Control and shortly thereafter became a law.

Beginning with the first of the year a movement carefully considered and planned for several years took shape in the form of the Wisconsin Psychiatric Institute. This is a department of the State Service under the auspices of the Board of Control. The work outlined for this Institute can be briefly summarized as assistance in the care and treatment of the cases that come under the jurisdiction of the Board of Control. The Institute at present consists mainly of a well equipped Laboratory and mortuary on the grounds of the State Hospital at Mendota.

One of the initial efforts of this Institute was to learn, if possible, how much syphilis figures as a causative factor in some of the conditions that result in State custody. The Wassermann test was therefore adopted as a routine procedure and applied to every admission at the Northern Hospital, Mendota, the Feeble-Minded Home at Chippewa Falls and more recently the Milwaukee Hospital for the acute insane. Through the hearty cooperation of those connected with these institutions, a large number of tests were made upon the inmates. At the same time tests were made upon the prisoners at the State Prison and the State Reformatory. This again was possible through the co-operation of the medical officers connected with these institutions.

As a result of this study, the Institute was in position to give reliable data concerning the prevalency of syphilis among the insane, feeble-minded, and prisoners of the State. A recent summary of the work thus far done gives the following results: 1,874 cases of insanity have been tested by the Wassermann procedure with 231 positive findings or approximately 12 per cent. Of 294 cases from the Feeble-Minded Home, 20 per cent. were positive. 765 cases from the State Prison and State Reformatory gave 12 per cent positive findings.

These figures impressed those in authority and brought about the adoption of the law, conferring upon the Board of Control the authority to arrange for the making of Wassermann and cerebrospinal fluid tests free of charge.

How will the provisions of this law meet the situation found as the result of our investigations? The syphilitic conditions found at the State Hospitals for the Insane are almost entirely cases of Paresis, Cerebrospinal Syphilis, or Tabes. These are usually late syphilitic manifestations and from their nature, prevention is the remedy that appeals to us, that is, the syphilis should be cured before these later conditions occur.

For the cure of syphilis one must first be certain of the diagnosis and then certain that sufficient remedial efforts are instituted. With little or no treatment a case of syphilis may be apparently cured, that is, all clinical evidences of infection are absent. To be certain of this apparent cure is the problem that concerns the State and herein lies the value of the Wassermann test. If the case is simply latent, the Wassermann test will reveal this fact and the patient will secure further treatment. If treatment is continued until a cure has

<sup>\*</sup>Read at the 69th annual meeting of the Wisconsin State Medical Society, Milwaukee, Oct. 6-8, 1915.

been established, in other words, to the point of negative Wassermann tests over a period of at least two years, we contend that the late conditions, those previously mentioned as contributing over twelve per cent. of the admissions of the State Hospitals, will be prevented.

Interpreting the spirit as well as the words of this act, the Board of Control has adopted every means that suggested itself to further the plan. The method that has been adopted is as follows: The physician can apply to the Institute for materials to be used in obtaining blood specimens and shipping the same through the mail. A small paniphlet of suggestions and information concerning Wassermann tests and spinal fluid examinations is issued to the physician upon request. This booklet contains a number of statistical data blanks which should accompany a specimen to the Laboratory. The information asked for on these blanks covers matters of interest to the practicing physician. The name of the patient is not essential if the physician thinks it advisable to withhold the same. A series of initials or identifying marks can be used in its stead.

Tests are made every day so that a specimen coming in the morning mail is examined and the report sent out by evening or the following morning. The system of reporting on these tests is explained in the pamphlet that is issued to the physicians. The method of making this test is also described in this pamphlet.

With the same general purpose in mind, namely, the prevention of late nervous and mental diseases resulting from syphilis, cerebrospinal fluid examinations were included in the provisions of this The spinal fluid can be received from the puncturing needle directly into one of the sterile vials that are supplied. Upon such fluids we make as complete an examination as is possible. This includes a Wassermann test, an estimation of its globulin content, a colloidal gold chlorid test (Lange's) and a cell count. The latter is not absolutely reliable with a specimen that is a few hours old yet if a fluid contains a considerable excess of nucleated elements, we believe that these are demonstrable after forty-eight hours. In short we make all the examinations of the cerebrospinal fluid that are looked upon as of clinical value, excepting bacteriological procedures.

Cerebrospinal fluid examinations are indicated

in practically every case of syphilis, certainly in cases that show a positive Wassermann of the blood serum two or three years after the initial sore. It is a well known fact and has frequently occurred in our own experience that the spinal fluid gives unmistakable evidence of syphilis of the nervous system months if not years before the classical physical symptoms develop. The examination of cerebrospinal fluid just outlined is not restricted to syphilitic disease. In the meningeal conditions of childhood such examinations almost invariably give valuable information. It is therefore suggested that fluids from such cases can also be submitted for examination.

The character of cases in which Wassermann examination should be made is varied. Its wide employment is requested by the State since a case of syphilis found where it was simply suspected or possibly not considered is just the case which would in all probability go on without appropriate treatment and later on develop parcsis or an allied condition.

From our limited experience at present in making tests for the general practitioner, having made somewhat over three hundred during the last few months, we are of the opinion that a Wassermann test is indicated in every case that offers any difficulty in diagnosis. It must always be suspected. The prevalency of this disease is truly startling. Our twelve per cent. findings among the State prisoners is an index of its frequency. Quite recently considerable stress has been laid to the existence of syphilis in many cases of neurasthenia. It would be a good practice to have a test made in every case of obscure nervous disease. Of course all genito-urinary cases should be Wassermanned, as well as gynecological conditions, poorly defined or atypical skin diseases, old ulcerations, enlarged glands, retarded healing of wounds, slow union of fractures, in fact, wherever a disease process departs from its usual course, syphilis can be suspected. The embarrassment of performing an exploratory laparotomy on a tabetic will be avoided if Wassermann tests are more frequently made in surgical tests. In short, we are desirous of making this work as wide as possible to throw out a net and catch all the unknown syphilitics, if this were possible, in order that every case be treated.

In known cases of syphilis, the Wassermann test should be made frequently. Certainly no case should be discharged from observation until these tests are constantly negative during a period of at least two years after treatment ceases. It would be an excellent plan if every physician could get in touch with any case of syphilis that was under his care during the last ten years and advise such an individual to have his blood examined again. The benefit of this law will not be felt unless the physician makes free use of its provisions. Upon the other hand if we are instrumental in preventing only one case of paresis every year, the State will be ahead since the cost of maintenance of such a case during his life more than equals the annual appropriation intended to cover the cost of making these tests.

In closing certain cautions can well be emphasized at this time.

A negative Wassermann is not conclusive evidence that syphilis is not present. It is highly presumptive, however, in healthy individuals yet a frank case of syphilis may infrequently give a negative Wassermann. This can at times be attributed to recent antisyphilitic treatment. It is advisable in such cases to have further tests made at subsequent periods. A four plus or three plus positive finding is almost invariably syphilis with few exceptions in this country. Scarlet fever is the one fairly frequent condition that may give a positive finding. During the chancre stage, the Wassermann test is rarely positive. It becomes so as a rule, four to five weeks after the initial sore. A mildly positive finding such as one plus or two plus must not be regarded as evidence of syphilis unless accompanied by a suspicious history or some clinical evidence of syphilis. In a case of known syphilis under treatment this mildly positive finding indicates that further treatment must be given.

As a final caution, I wish to forcibly emphasize the fact that errors in Laboratory technique are always possible and therefore should the Wassermann report be entirely at variance with the clinical diagnosis, suspect the Laboratory first and submit another specimen.

In bringing this law to your attention, I would be neglectful of my duty were I not to indicate the debt of gratitude we, as physicians and citizens of this State, owe to all those who assisted in bringing into existence what I believe to be the most effective and practical effort in the prevention of paresis and allied conditions that has ever been undertaken by any State.

#### DISCUSSION.

PRESIDENT: The physicians of the state of Wisconsin are indebted to Dr. Lorenz for the excellent service which he is rendering for the profession, and for having secured the law which makes it possible to do this work for the physicians in a laboratory the reliability of which is above question. The discussion of Dr. Lorenz's paper is to be opened by Dr. F. Gregory Connell, of Oshkosh.

Dr. F. Gregory Connell, Oshkosh: Mr. President, Ladies and Gentlemen: In opening the discussion upon Dr. Lorenz's paper, I will merely take the time to express my appreciation for the service offered by Dr. Lorenz and the Wiseonsin Psychiatrie Institute, by means of which the refinement of diagnosis, upon which rests the responsibility and, hence, effectual treatment, and which has hitherto been available to those who have access to the large clinics or to those of comparative affluence, is now brought within the reach of the humblest citizen of this state, wherever he may be located. As long as this advantage was given only to the people already inmates or patients of state institutions, its value was bound to be more or less academie. In order to be of practical value, it must be available to the people who, in the natural course of events, without diagnosis, and no or late treatment, are to become the inmates of these institutions. This is truly extending the Wisconsin idea, as it has been applied in various branches of the Department of Agriculture, and in the library bureau of the Legislature, to its logical and ultimate usage, the preservation of health, and the conservation of life. What the throat culture and the Widal reaction have done for the acute diseases of diphtheria and typhoid, the Wassermann, at the proper time will do this chronic and protean disease of syphilis.

Complaint has many times been made of the enormous expense to the state for the care and protection of inmates of our insane hospitals, when compared with the absence of any tangible effort at search for a cause or for prevention. With the State's free Wassermann laboratory which the public in general, and not the medical profession in particular, owe to the energy of Dr. Lorenz, we have every reason to look for an improvement in this matter.

DR. Daniel Hopkinson, Milwaukee: I wish I could talk as enthusiastically about state surgery as Dr. Connell talks about the state laboratory. I really believe that this free Wassermann examination is along the right lines. There is absolutely no question about that. And free surgery is along the right line. But it is not along the right line when you take a man earning \$50,000 a year and permit him to get a free Wassermann from the state of Wisconsin. Perhaps this comes with bad grace from me personally, having a private laboratory, to speak in this line, and some of my friends said, Hopkinson, I would not do it.

I believe there will be a great deal accomplished by this free Wassermann test. I also believe, however, that every physician should personally know as to the class

of patients whose blood he is going to submit to the state laboratory. And in justice to the young men who are going to be laboratory workers, and who have the birth-right to establish laboratories, these men should be supported by the rest of the profession. As the men in the country support the surgeons, and as the men in the country support the men who are consultant physicians, so should the men in the country and the men in the city support the young men who are devoting their entire life to laboratory work, and all of this laboratory work should not be sent to the state university or to school universities, or to the state laboratories. The efficiency of these laboratories is unquestioned. Their application to men who are free and able to pay their way is questionable. It will not be long probably-and this is a step in that direction—until we have community medicalism, and you and I will have no individuality but will be community doctors. So much for letting off steam.

I have enjoyed Dr. Lorenz's paper very much, because I know that Dr. Lorenz knows whereof he speaks, and he is a truly scientific man. There are some things, however, in regard to the sending of blood, that have always raised a question in my mind as to whether or not the serum should not be separated. In our laboratory we have controlled this. We have taken bloods in which the serum was separated, and in which the serum was not separated, where hemolysis did take place. Often bloods transmitted from a distance were received hemolyzed. These hemolyzed sera, unless they show distinctly positive, are always accompanied in the report by a question as to the result. We personally do not believe that the hemolyzed serum will give us an accurate result, and always question it unless it is distinctly positive. And assuming, as Dr. Lorenz says, which is perfectly correct, that a one or a two plus positive is not sufficient unless supported by a clinical history and symptoms that are suggestive. A four plus when hemolyzed may give us a one or two plus in the picture of the result.

Dr. Lorenz: I simply wish to say that I agree with Dr. Hopkinson in all that he has said.

PRESIDENT: We all do, Doctor.

Dr. Lorenz: I do not believe that the \$50,000 men should have a blood serum sent to any state laboratory, and I do not think that any physician should take advantage of this opportunity and permit the man who can afford to pay to become a charitable case. I do believe that this is an effort to reach the poor fellow who cannot pay \$5, or \$10, or \$15. And I might say right here that a charge of \$10 is not excessive for a Wassermann examination. The only reason that we can make them as cheaply as we do, is because we make a large number. The preparation for fifty Wassermann examinations is no more than the preparation for one Wassermann examination, and were I in a private laboratory I doubt very much whether I would do a Wassermann examination for less than \$10.

CANCER OF LOWER LIP.\*
BY VICTOR F. MARSHALL, B. S., M. D.,
APPLETON.

Recent statistics of the state of Wisconsin for the last five years during the period of 1908 until 1913 have shown that there is a diminution in the number of deaths from tuberculosis, but an increase in the number of deaths from cancer. In the year of 1908 there died from tuberculosis 2,509 persons, and in the year 1913, 2328 persons died from this disease, whereas, in cancer in the year of 1908, 1,513 persons succumbed to this disease, and in 1913, 1,755. Therefore there can be no question as to the increase in the death rate from this disease. Vital statistics of the United States have shown during the same period from 1908 to 1913 from cancer and other malignant tumors per 100,000 population, an increase in the death rate from 71.5 to 78.9.

If we omit cancer of the breast and uterus, which are most common in the female, cancer diseases are more common in the male. As we know there are multitudes of competent, energetic, and enthusiastic workers endeavoring to discover an etiology of cancer, but up to the present time its cause remains unknown. No theory which has been advocated by any one worker has been proven. Many diseases have been cured by serum therapy and immunizing vaccines. These methods have been futile in this disease. Superficial skin cancer has been cured in many instances by X-ray, and by radium in a limited number of cases. Surgery to the present day offers the only efficient method for complete cure of this disease.

Murphy, writing in his recent book, "The Clinics," states, "The hope of cancer rests in the education afforded by the public press." If we are to obtain permanent results in this disease, it must be impressed upon the people that they must come early to the surgeon, for it is the disease and not the treatment which is dangerous.

Bloodgood enumerates three points which contribute to the cure of cancer: "First, The importance of early diagnosis. Second, The slight tendency for the growth to form metastasis in vital and deep seated parts of the body. Third, Accessibility for the removal of the primary growth and

<sup>\*</sup>Read at the 69th annual meeting of the Wisconsin State Medical Society, Milwaukee, Oct. 6-8, 1915.

the lymphatics first involved after the disease has progressed beyond the primary focus."

Bloodgood states in his recent article upon cancer of the lower lip, "Considering all cases in five or more years elapsed since operation, the probable percentage of cures in the different groups are as follows: The first group will give 63% cure where a V-section is removed. The second group gives 95% cure where the submental and submaxillary glands have been removed, and when not carcinomatous, and in addition where there has been a V-section of the lip. The third group gives 50% cure where the glands have been removed which are all infected, and in addition a V-section of the lip."

Halstead has stated that there is 80% cure in cancer of the breast where the axillary glands are not affected, where as in cancer of the breasts where the axillary glands are affected, the percentage of cure following radical operation is only 20 to 40%. Perhaps it is because the epithelial cells are slow to change their shape and regularity and because of the slow extension by the lymphatics, that the advancement in the treatment of cancer of the lip has not kept pace with the treatment of cancer seated in other parts of the body.

This disease may not be evident in the glands of the submental, submaxillary, and the deeper cervical glands for many months or years after it has started in the lip, so that frequently it is thought by the patient that there is no connection between the two. In breast cancer, no present day surgeon would think of removing the breast without removing the axillary glands at the same time, but this is not so in cancer of the lip, for a V-section still continues to be the operation generally carried out by the operating man.

If we are to achieve a percentage of successes in cancer of this region in comparison to the successes achieved in the early operations upon cancer of the breast, we must consider none but a radical operation for this trouble. Statistics have only shown too conclusively that the secondary operations for the removal of the invaded lymphatics are very unsatisfactory, and but too infrequently curative. The lower lip has very definite lines of lymphatic drainage, being composed of two groups of lymphatic vessels; i. e., the submucous and subcutaneous. The submucous, of which there are two or three in number, pass directly to the submental and submaxillary glands upon the same side. The sub-

cutaneous vessels, which vary from two to four in number, differ from the former group in that they pass across to the glands of the opposite side and intercommunicate with each other. One can therefore, readily see the necessity for removing glands of both sides if the skin surface is at all involved or when the tumor is in close proximity to it. There is therefore, a pronounced similarity in the removal of the submental and submaxillary glands of this region, as there is in the removal of the axillary glands in cases of cancer of the breast.

If the surgeon has to treat malignant diseases of this region with the prospect of absolute cure, much depends upon the early diagnosis of this trouble. The age at which this disease is most prevalent is between 35 and 60 years, but cases have been reported in which the disease has been present in individuals of 20 years. It is more frequent in the male, but has occurred infrequently in the female. The upper lip is rarely the seat of this cancer, and the writer has met with but one in his experience. This disease usually begins upon the prolabium between the mid-line and the angle of the lower lip, usually as a fissure, wart, ulcer, excoriation, tubercle, or leuco plakia, and its change from a benign to a malignant condition is as Murphy has so aptly stated, "A sequence of repeated mild irritations." The epithelium of this region is squamous in character, and it is due to the effects of repeated mild irritations of the lesion that the squamous cells break through the limiting membrane. Bloodgood states, "Any lesion of the lower lip which does not heal wtihin a few weeks should be excised." This procedure can be carried out with no discomfort to the patient, and with but an insignificant scar under local anaesthesia. A microscopic examination of the specimen removed by a competent pathologist leaves no doubt in the mind of the surgeon as to the course he is then to pursue. If the section removed is innocent in nature then no harm is done to the patient. If its malignancy has been established, then the patient may be acquainted with its nature, and a radical operation advised and carried into execution.

Beckman states, "All cancers in early stages are limited to small areas, and are capable of removal and cure." Yet no surgeon of experience can say positively that the glands are involved until they are removed. It is often difficult to palpate enlarged glands in the neck and even then one does

not know whether it is a purely inflammatory condition or malignant.

There should be but little difficulty in the differential diagnosis of this condition from other diseases, which occur in this locality, for the lower lip is but rarely the seat of any malignant disease other than that of a squamous cell-epithelioma. The benign ulcer does not persist more than a few weeks, and is early amonable to efficient treatment. Specific diseases usually affect individuals young in years and mostly females. This condition appears more frequently in the upper lip. The early involvement of the lymphatic glands, the appearance of the secondaries within a few weeks. and a positive Wassermann, should leave no doubt as to the diagnosis. Any lesion of the lower lip which does not heal within a reasonable period of time, viz., a period of two or four weeks, should be considered suspicious, and a portion excised for microscopic study.

The prognosis is considered good where the glands are not involved, and when they are resected at the time of the operation. On the other hand, the prognosis is considered unfavorable as regards recurrence where the glands are involved.

The submental group of glands is from two to four in number lying just beneath the center of the lower jaw between the anterior bellies of the digastric muscles. The submaxillary group consists of from three to five glands along the lower border extending back as far as the angle of the jaw. One or more of these glands may lie wholely within the submaxillary salivary glands, and it is necessary to remove the submaxillary gland in order to make a complete resection of all these glands. The deep cervical glands are only to be considered, and never call for a removal excepting as they are infected secondarily.

In operating for this condition the following technique has been carried out: The head of the table is raised thereby placing the patient in the most favorable position for the surgeon. A collar incision is then made from 1 inch to 1½ below and parallel to the lower jaw from the sternocleido-mastoid muscle of one side to the same muscle upon the opposite side. This incision extends through the skin and platysma muscle. In using this incision the lower branches of the facial nerve are not interfered with. The submental and submaxillary gland areas are thereby exposed. The glands are then removed in one block beginning

upon either side. The hypoglossal nerve has to be avoided as it passes into the tongue muscles just behind and beneath the anterior belly of the digastric. No harm may be done from an injury to one nerve, but where both nerves are injured, a complete paralysis of the tongue and pharynx may follow, and also a complete inability of the patient to swallow. It is not harmful to the patient to remove the salivary glands. Upon a complete removal of these two groups of glands, the incision is closed by means of deep catgut sutures, and a second row of a continuous running catgut suture placed subcutaneously.

Provision by means of stab drains should be placed in both submaxillary spaces to carry off any exudate. After the completion of this stage, the lower lip may be given attention. A V-shaped incision to remove the growth from the lower lip is then made. This incision should be at least onehalf inch distant from the border of the growth. Upon completion, the contour of the lower lip may be re-established, the first sutures being placed at the border of the muco-cutaneous surface to insure perfect reposition of tissues and an avoidance of an asymmetrical scar. The drains are usually removed after a period of from two to four days. The patient may be permitted up the second or third day. In more severe cases, where it is necessary to remove a larger section of the lower lip, plastic surgery of this part of the face may be necessary.

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# GONORRHEA IN ITS RELATIONS TO THE FAMILY.

BY A. T. HOLBROOK, M. D.,

MILWAUKEE.

It is customary for the medical essayist to lay much stress upon the importance of his subject and usually to insist that not enough attention is given its consideration. The importance of my subject is due to the fact that Gonorrhea, which Neisser states is the most wide-spread of all diseases, with the exception of measles, probably has caused more sorrow and suffering than any other disease known to medical science, and has done more to depopulate communities and to cause race suicide.

As regards the attention it has been given, the daily—yes, the hourly—cry of distress that rings in the ear of every physician, surgeon, obstetrician, or specialist in any field has led to the establishment of innumerable committees, commissions and even societies both medical and lay in membership, for the investigation and control of this affection.

Our literature containing the reports of these various investigators show clearly the impossibility of accurate statistics on the extent and the effects of the spread of general infection from medical and sociologic standpoints; but these statistics show just as clearly certain constant agreements that are convincing and are appalling.

It is not my purpose to recite a boresome number of figures; but I wish to present some conservative and carefully made estimates from reliable and competent sources "to stir up the fire a little," as it were. Regarding the percentage of the population of cities and larger towns in the United States that are affected, the following are as reliable as any obtainable figures: In young men, E. L. Keyes estimates 50%, J. B. Clark 75%, L. Weiss 80%. Neisser estimates in Europe that 75% of all men and 45% of all women are infected at some time in their lives; of the 45% of women he estimates that 30% have been infected by their husbands.

Bailey says in the United States 75% of males and 17% of females are infected. E. Schwartz calculates that 10% of married men enter wedlock with chronic gonorrhea and that an additional 10% acquire it during married life. Probably 1/3 of all married women who have gonorrhea have been

infected by husbands, who believed themselves cured. At least 50% of all pelvic inflammations in women are caused by gonorrhea, and 40% of all female gonorrhoeics suffer pelvis symptoms. Thirty to 50% of all childless marriages are caused by gonorrhoea, as well as many of the one-child sterilities. Over 25% of all blindness is due to gonorrhoeal ophthalmia.

These facts in a general way are known to every medical man—they are known to social workers they are talked of and gasped at by women's clubs, by propagandists, educators, and policemen. The medical student hears of them in lectures, and after graduation reads of them in his journals as he waits for the office door bell to ring-and finally it does ring and in comes an old-time chum, who passes the time of day with him, invites the young doctor to usher at his wedding which comes off in a fortnight and then casually says, "By the way, I've got a little dose that I suppose ought to be fixed up before I get married." And the young doctor with his brain full of 40 per cents, and 75 per cents, and the efficacy of prophylaxis and the educational propaganda for reform is up against the concrete, practical problem of-What are you going to do about it? Probably he is not going to announce the thing publicly and fight a duel with the persistent groom-to-be as one notable Frenchman did; probably he will not inform the bride's family and take a chance as to how the jury will interpret the old law that "a person duly authorized to practice physic or surgery shall not be allowed to disclose any information acquired in attending a patient in a professional capacity, and which was necessary to enable him to act in that capacity"; probably the young doctor won't sign the Eugenic Marriage Law Certificate that same afternoon—but it is just as probable that he will later—and our hope is that when he does it he will give some good, horse-sense advice and make his chum understand what it means.

When this young doctor looks up the subject for his guidance in the books, he is going to find that same old array of percentages and the same chapter on prophylaxis.

What are our concrete duties then, as physicians, in facing this problem of gonorrhoea in its relation to the family?

Let us take up first the condition where gonorrhoeics of either sex are planning to be married. Our first duty on learning of the condition is plainly to prevent or postpone the wedding. And this is no light duty. Personally, I believe to secure the postponement of such a wedding until the case has been satisfactorily treated, a physician should use every possible device at his command. He should explain patiently; he should entreat; he should conspire with his patient in any satisfactory subterfuge to the very limits of his conscience—and then some. If these fail he should bring out that much maligned, but very useful Eugenic Law, and should threaten. Then he will probably find that if his patient ean't afford to go to a warmer and dryer elimate for his rheumatism, he ean at least go to bed with an acute colitis with painful uleeration of the lining of the bowels -or something else that women won't ask many questions about.

If after all is tried this postponment of marriage cannot be arranged, it is simply a matter of explaining explicitly to the infected one the dangers evident and remote, and the line of treatment that should be pursued. The signature on a Eugenic blank after that is a matter between a doctor and his conscience. Some local consciences are of the sort that are stilled by the thought that there are many other doctors, and many that make superficial examinations; and then, Waukegan is not far off.

Of course, if these weddings do take place, the cases in which infection is escaped will be rare. Undoubtedly some worldly-wise brides or grooms may have the matter frankly understood between them and through abstinence and proper treatment may escape. Some may practice successful subterfuges; but probably most of these deception cases come to the divorce court or get some notoriety under a newspaper caption of, "Deserted on his Honeymoon."

For the most part another gonorrhoeie is added, another series of miscarriages is started, more consultations about why they don't have children, more douches and iehthyol; and another double salpingeetomy is posted on the bulletin board.

If we are fortunate enough to secure a postponement of the wedding, or if it is not as yet definitely planned, the first part of the eourse we are to pursue is plain—we treat our patients to the best of our ability and we finally reach a point which is called a cure. Ordinarily when our patient is not anxiously waiting to fix a wedding date, we are very careless in using this word "cure." "Drop

in again in ten days," we say, "and yet me look you over." But when we know that wedding cards will be out in ten days it is a different matter. We strip the urethra, we massage the vesicles, or we swab out the folds in a vagina, we stain carefully and find no gonocoeei. We may call up the pathologist and ask him what he thinks of trying a Complement-Fixation Test. And he will answer, "Well, you know, that is pretty sure on very active eases, but there isn't enough call for us to develop it very extensively. Its rather experimental you know, especially on old, light infections. I don't believe it will help much. You might try it, though." So if the patient is rich we try it and get a report that it was a "minus one X" or about that; and we ask what that means in words of one syllable and the pathologist says it means a probable negative, but he would like a little more blood before he could be sure. And so we are a little uncertain about our eases and the ten days are about up. The first part of our eourse when we were giving the treatment was plain; but now what ought we to do, for we know in our hearts that we are not sure that the case is cured. And right at this point appears the fallaey in the Text Book, in the resolutions of the Anti-Viee Society; in the harangue of the Eugenie Faddists-and that is the assumption that a physician ean tell definitely by an examination at a particular time, whether or not a person is infected with gonorrhoea at that time. I am frank to sav that I cannot determine it and that when patients marry under circumstances that are at all suspicious I plainly advise them to observe all possible precautions and to place themselves under medical observation.

When gonorrhoea develops after marriage it means the careful, painstaking explanation of dangers and of the necessity of treatment, it means the helping to preserve domestic peace, the co-operation in satisfactory subterfuge, the use of every bit of tact we possess; it means also the same sort of post-treatment precautions.

These it seems to me are the duties of the physician when gonorrhoea threatens family relationship; but with these duties is plainly one more, and that is to help in an intelligent, discriminating way to disseminate the knowledge that would spare the torture of a man who was taught the old phrase that "it wasn't as bad as having a bad cold"—and then ignorantly and innocent of all wrong-doing, infects his wife—rather than to have done which

he would have given his life. Whatever criticisms may be offered of the Wisconsin Eugenic Marriage Law it has at least accomplished this one purpose—it has given physicians the opportunity of avoiding for those about to be married, the terrible experience.

IMPROMPTU REMARKS.\*

BY W. L. RODMAN, M. D.,

LATE PRESIDENT OF THE A. M. A.,

PHILADELPHIA, PA.

Mr. President, and Members of the Wisconsin State Medical Society:

In the first place, I wish to say that I have great pleasure in being here, though I felt almost until the last moment that I would not be so fortunate. There was illness in my family, and I feared until a telegram came to me this morning, that I should have to hurry on from Chicago. But, fortunately, my wife, who has been the patient, knows how much I enjoy these meetings, and telegraphed me in time to catch the morning train from Chicago, saying, "By all means go to Milwaukee; I am much better." (Applause.) So I am with you, and have very great pleasure in being here.

It is an even greater pleasure to extend to this large and representative body of a state which I am told has a larger percentage of members in its state society in proportion to the number of practitioners, than perhaps any other state in the Union, the warmest and most cordial felicitations and greetings of the parent organization, the American Medical Association. (Applause.)

You, as members of your county and state societies, are *ipso facto* an integral and important part of the American Medical Association. Therefore, what concerns so many of you cannot be a matter of indifference to the parent organization. I congratulate you particularly, on this large, most earnest, and interesting meeting, for I can join with the President in saying that I have never in my life seen such rapt and perfect attention given to speakers as I have this afternoon. (Applause.)

I wish to congratulate Prof. Murphy on the

\*Delivered at the 69th annual meeting of the Wisconsin State Medical Society, Milwaukee, Oct. 6-8, 1915.

results and timeliness of his paper. We are all very much interested in the question of comminuted fractures at this time, and I feel a personal obligation to Dr. Murphy for the clear, patient, and scholarly investigation which he, along with his colleagues, has evidently made of this subject. Only day before yesterday, I had the privilege of seeing, in the University Hospital at Minneapolis, one of the most enthusiastic and expert exponents of Mr. Lane's technique, introduce a large steel plate. He did it reluctantly, and stated at the outset that he would not do it unless he was forced to, but that it seemed to be the only way in which he could maintain accurate coaptation of the fragments. He discussed the question of putting in the tibial graft, but felt that he could not maintain the fragments in place by that method. As I say, he introduced the foreign body reluctantly, for his remark was, that he did not like to put so much hardware into the human body. I feel that this is just about the way that most surgeons are inclined to think at this time, and yet, if one follows the scrupulous and masterful technique of Mr. Lane, there is no doubt but that excellent results will be secured in many, and perhaps in most of such fractures. And still I felt, as Dr. Law felt day before yesterday, and as Dr. Murphy evidently feels today, that it is something that we should do as infrequently as possible, for it is not pleasant to find later on that Lane plates and screws are loose in a wound.

As to the value of the osteoplastic graft, I believe, as I said once before when Dr. Albee of New York was addressing the Academy of Surgery in Philadelphia, that if his then audience were called upon to write down, after careful thought, the 25 additions which had been given to modern surgery in the last 10 or 15 years, that they might differ as to the order in which they would write them, but that practically every one would admit that Albee's operation or the principle that he introduced, was an epochmaking one, a real mile-stone in surgery, and that it would in all probability live forever. I have seen Dr. Albee operate. His technique seems to me to be perfect, and I believe that he is certainly on the right track. And yet, I think that doctors ought always to be honest and report mistakes, for we can more often learn by mistakes than by successes.

I believe, however, that Dr. Murphy is undoubtedly right in saying that we should eschew the use

of the steel, metallic, or non-absorbable plates, and use the absorbable bone plate wherever it may be done.

And this leads me to say, Gentlemen, that, after all, I am a little old-fashioned, and I expect there are some in the audience who sympathize with me. One can get very good results in a large percentage of fractures without the introduction of any foreign body at all, if one will only use an anesthetic, which is infrequently done. Particularly in children should it always be used. Relax the muscles thoroughly, and make an accurate coaptation of the ends of the fragments, then put on a suitable dressing, and I maintain it will be the exceptional, certainly not the average case, where the introduction of any foreign material will be called for. (Applause.) I cannot help but think that there is too much operating going on for these comminuted fractures, and I am sure that some young men, who are anxious to flesh their maiden knives, go into these cases, and do harm that results in amputation, when treatment by any other well-established means or methods that were new years ago, would perhaps have secured the best possible results. But for the exceptional case in the hands of the skilled technician—certainly no one else ought to operate on compound fractures - the means that Dr. Murphy has expounded so well this afternoon, I think are the very best that we have. Dr. Murphy said that he was going to tell us very little, but he has told us a great deal, and he has told it in a very delightful way.

Now as the President said that I might transgress and say something about anything I chose, I am going to do so. I had not intended to do so, but was requested by Dr. Seaman, and Dr. Brown, and by the secretary, to say a few words on the subject of a National Board of Examiners. I do not believe that I should have done it if I had not had just the experience I did have Sunday afternoon, and I am going to tell you what it was, and leave you to be the judges as to whether it ought to be allowed to happen. In going from the Roehester elinic, where I have been for several days, after attending the excellent meeting of the Minnesota State Medical Association, I went to Minneapolis to deliver an address. On the train was one of the staff, a man that I have known for many years, and I saw that he was a little nervous, abstraeted, and preoccupied. I asked him where he was going, and he replied that he was going up to "Oh," I said, "you will have no trouble about that." "Well," he replied, "I don't know. I have been out of college for many years." Now here was a graduate of Harvard University who had served in the Massachusetts General Hospital, had attained an enviable position in Boston, was then called to the state of New York to a still more responsible and honorable position than he had in the Bay State, and then, having attracted national and international reputation, was called to the Mayo Clinic. On account of results of the work that he had done for the last few years as an exponent of thoracic surgery, he was called there to take charge of that department in this wonderful clinic. And yet he must, after passing the State Board of Massachusetts, and the State Board of New York, now pass the State Board of Minnesota. Gentlemen, is that right? When misfortune or ill luck may overtake a man at the age of 35 or 40 or 50 years of age, and he finds that he can better himself by moving from one state into another, is it right that he should have to sit between two students and take an examination, as I had to do when I was 40 years of age? Although I had vacated a professional position in Kentucky to take a similar one in Philadelphia, I had to sit with students to whom I had taught surgery, and take the same examination that they took, in chemistry, anatomy, physiology, midwifery, and other subjects. Six of the examiners wanted to be very kind to me, and exempt me from the examination; but the seventh said, no, the law of Pennsylvania is mandatory, we cannot make any exceptions, and I will not sign his license, if you do. So I had to take my medicine, as I say, sitting right between two of my own students. Well, I did the best I eould, after boning and boning and boning, and I did pretty well in some branches, and I did not do very well in others, I guess; especially was I not proud of my record in chemistry. When I passed ehemistry, a good many years ago, I entered up a fervent prayer to the Almighty that he would permit me to forget all the chemistry that I knew, for I could not see how it would be of any use to me in the practice of medicine. And I know, Gentlemen—those of you who have any doubts as to the efficacy of prayer—that that is one prayer that was answered. (Laughter.) And to show you just what foolish questions were asked in those days, I may say that I was talking to the great

Minneapolis to face the State Board of Examiners.

Yandell—all the Yandells were great, but he was the greatest—and he said, "Do you know what my father asked me in chemistry, when I came up before him in examination?" His father was professor of chemistry. He received him in a very austere way, you never would have thought that the relationship was father and son; and the professor said, "Mr. Yandell, how do you make black ink?" Yandell said in reply, "I do not know, sir." The Professor asked, "How do you make sulphur matches?" And again the reply was, "I do not know, Professor." The Professor then asked, "Do you know any ehemistry at all?" and the reply was, "Professor, if you ask me any question having the remotest bearing upon medicine, surgery, or obstetrics, I will try to answer it, but I expect to make enough money to buy all my black ink and sulphur matches."

Chemistry in those days was of course a very different thing from what it is today. The chemistry we are teaching now is sensible; it is organic chemistry, physiological chemistry, and does have a direct application to the practice of medicine particularly, and therefore, I do not wish to reflect upon it. I am only telling you how little I knew about chemistry in my day, and how little necessity there was for knowing anything about it, as we were asked to make sulphuric acid, and things of that kind, and that is about all that we were taught.

Now, Gentlemen, to overcome these hardships which have been perpetrated from day to day and in every state in the Union, we have formed a National Board of Medical Examiners, not a Federal Board, not controlled by the general government, because the police powers are in the control of the states, and they are sovereign powers and cannot be interfered with by the general government. But it is a national board nevertheless, and the Government is very much interested in it. Why is the Government interested in it? Because every man here who is old enough to go back 15 or 20 years knows that the Medical Department of the United States Army utterly broke down, even in our little Spanish War that we had in 1898; they could not get enough doctors; they took everybody that applied. And I know that the present Surgeon-General feels the situation and responsibility upon him at the present time so keenly that he is most enthusiastie—even more so than I am—about this National Board. And why? Because the man who passes the National Board automatically, if he chooses, passes right into the medical reserve corps of the Army, without any further examination except a physical one, and that because the Government requires a physical examination, and should, because any man who breaks down must get a pension. The Surgeon-General of the Navy is just as much interested in it, because they also have a medical reserve corps in the Navy—not so large a one, but they have one nevertheless. The Public Health Service has no reserve corps, but they are just as much interested in this National Board, and the men who pass the National Board becomes preferred candidates for any position in the gift of the Public Health Service.

On this Board are two representatives from the Army, two from the Navy, two from the Public Health Service; and the Government has very generously placed the Government Medical Schools, hospitals and laboratories of these three Services at the disposal of this Board.

. The examination will be oral and written, laboratory and clinical; the standard of the council on medical education will be enforced in every respect, plus the requirement that every man taking this examination must have had one year at least, as an interne in a hospital. Why that? Because, to get the co-operation of the Army and Navy and Public Health Service, all of which require an internship in the hospital, we must have a very high standard. Therefore, the Board must be for the exceptional rather than the average man. And I go into that rather minutely, because you will see at once that we could not get, and do not want more than a small per cent. of all the graduates in the United States. There is not the slightest disposition on the part of this Board to interfere in any way with the State Board. It is impossible. You can see that by the presence and active co-operation of Dr. Herbert Harlan, one of the most prominent members of the State Confederation, and today one of the members of its Executive Committee. If a man should pass the National Board, then elects to go to state A, or state B, he goes there, pays the fee required and becomes licensed. The only thing we ask is that it be done without a second examination. If the examination of the National Board is of as high a standard as we think it will be, equal certainly to that of any state in the Union, even to that of the Conjoint Board of the Royal Colleges of Medicine and Surgery in England, then

the men who pass it ought to be accorded recognition. Shall our states be less generous than the provinces of Canada who accord unanimous recognition to their National Board? The examination will be very largely laboratory and clinical. Operations will be done on the cadaver. Arrangements have been made for meeting all possible exigencies contemplated by such an examination.

Now do not think that the examinations are always going to be held in Washington. They are not. Just as soon as the number of applicants justifies it, the Board will be subdivided into two or three bodies, and examinations will be held simultaneously in Washington, Chicago and Denver, or possibly even, San Francisco. One might be held in Milwaukee. They will be held in different places from time to time.

Last week Minnesota endorsed such a board unanimously, which was very gratifying to me, because it is a state of such very high standard. Kentucky only the week before endorsed the Board. The American Association of Military Surgeons endorsed it. The American X-ray Association, at a very large meeting in Atlantic City, endorsed it unanimously. And it would not be at all unpleasant if this distinguished body would also add its endorsement.

Gentlemen, I feel that I have spoken too long. I thank you very much for the pleasure of hearing me, and I assure you again of the great pleasure that I have of being here. (Great applause.)

#### DISCUSSION.

Dr. George C. Ruhland, Milwaukee: I feel that Dr. Rodman has pointed out what too long has been an absurdity in the history of the American Medical Practice, and has also pointed out the right way towards a betterment of this situation. I feel that the Medical Society of the state of Wisconsin can do no better thing than to fall in line with those who have already endorsed this plan. In order to bring the matter before this Society for action and disposition, I should like to offer the following resolution:

Resolved, That the Wisconsin State Medical Society commends the movement for the organization of a National Board of Medical Examiners.

Resolution seconded.

VICE-PRESIDENT DEARHOLT: Gentlemen, you have heard the resolution which has been seconded. Are you ready for the question?

(Calls for the question.)

Resolution unanimously passed.

VICE-PRESIDENT DEARHOLT: The resolution has been passed unanimously by Wisconsin also.

DR. RODMAN: Gentlemen, I thank you very much.

ACUTE ASCENDING PARALYSIS FOLLOW-ING GRIPPE.

BY LOUIS M. WARFIELD, M. D.,

MILWAUKEE.

The epidemic of grippe which swept the country during the past fall and winter resulted in many deaths from complicating pneumonia and many distressing sequelae. Although Pfeiffer's influenza bacillus was found in the sputum of the cases of the respiratory type, doubt was thrown on its etiological relationship by various workers, particularly those in Chicago. They found streptococci, pneumococci and the micrococci catarrhalis. In many respects the cases reacted like those infected with streptococci.

Not the least important of the sequelae were the neurological manifestations. Cases were seen ranging from palsies of small groups of muscles to general multiple neuritis, and one case showed all the symptoms of acute ascending paralysis.

The history of this case is as follows. F. M., a laborer, twenty-eight years old, (Hosp. No. 17-876) was brought to the Milwaukee County Hospital on Dec. 24, 1915, complaining of rheumatism. On admission it was noted that he seemed very ill, he was in a profuse sweat. He could not raise his legs from the bed, he could with great difficulty raise his arms, but he could not lift his head from the pillow. The heart was rapid and the pulse was full and bounding. The blood pressure was 120 and 64, pulse pressure of 56. The leucocytes were 12,500.

He was so ill that only a brief history was obtainable. He complained of loss of muscular power in all his muscles except those of the forearms, shortness of breath, and cough.

Three weeks before he entered the hospital he was taken with a severe attack of grippe (?). He was in bed two weeks. He then got up for an hour but had to go back to bed. About four days before we saw him he noticed that he could not move his feet. The paralysis rapidly extended upward until it reached the stage at which we first saw him.

The knee-jerks and all other reflexes were abolished. He could feel pin pricks but there was noticeable dulling of sensation. He was too ill to test out heat and cold. He had distressing dyspnea for no obvious reason. The urine was of high

specific gravity, 1034-1038, was dark red, contained a large amount of albumin. Microscopically blood cells, blood casts, coarsely granular casts, pus cells and epithelial cells were seen. There was no swelling of the feet, no puffiness of the face.

There was slight irregular fever. Two days after admission he felt better but the paralysis was complete, the respirations were shallow, and the pulse was rapid. On the 29th he suddenly grew worse, the rectal temperature registered 110° F., the radial pulse was not obtainable and he died within an hour of the time the grave change in his condition was noted.

No autopsy was permitted.

We feel that we are justified in calling this case Laudry's paralysis although there are certain features about it, particularly the intense acute nephritis, which might be raised as an objection to the diagnosis. At any rate it was acute ascending paralysis. The offending organism we do not know. We are inclined to believe that it was a streptococcus although that is pure conjecture.

Thousands of lives are needlessly sacrificed to cancer. Many of these afflicted could be saved. It is largely a question of getting early medical and surgical attention. Any "sore" that refuses to heal should be seen by a physician.

Because thousands of lives are lost annually, the American Society for the Control of Cancer has issued many valuable statements concerning the disease. In one of these the society says:

"Lives now needlessly sacrificed could be saved if the patient would go to the surgeon as promptly as does the average person attacked by appendicitis. Unfortunately, the evidence is only too clear that a different attitude toward cancer prevails and causes many preventable deaths.

"Proof of this fatal neglect is found in the experience of a prominent surgeon who recently studied his case records in order to obtain information as to the delay in the average case.

"Of sixty-five recent patients, thirty-five were men and thirty were women. Further study of these sixtyfive cases showed that after the first discovery of suspicious symptoms the men had waited an average of twelve months before consulting the doctor and the women had waited on the average of eleven months.

"Many other surgeons could produce very similar records. Winter, Koenigsberg, Prussia, the pioneer of the education of the public in regard to cancer, once examined the records of 1,062 operable cases and showed that 87 per cent of these patients could and should have

applied for treatment much earlier, when they would have had a far higher chance of recovery than was actually the case."

One swallow doesn't make a summer; and one test doesn't constitute a guarantee of satisfaction. There are always a number of aspects to every article of utility, and although it may measure splendidly up to one of these aspects, if it fails in all the rest it cannot be said to be a very efficient article. "Best by every test" is the measure of efficiency. That is the measure by which Calumet Baking Powder excels. Chemically, phyically, physiologically, and domestically, it fulfills all the demands of modern science and art. It is chemically correct, physically pure, physiologically wholesome, and domestically efficient and dependable. If you can think of any other quality that ought to characterize a first class baking powder, no doubt the manufacturers will see to that, too. Personally, we can't. It looks to us as if a baking powder that can make good on those four claims is about as nearly perfect as a baking powder can be. However, you know the old proverb-"the proof of the pudding is in the eating of it." Calumet will stand that test, too.

#### REDUCES BABY DEATHS.

Mortality among babies under one year has been reduced 5 per cent in Milwaukee in 1915, according to the report of the New York Milk commission. The same reduction has been made in Detroit and Denver.

Out of twenty-six of the largest cities, Columbus leads with a reduction of 23 per cent. St. Louis follows with a reduction of 21 per cent; Louisville. 19 per cent; Cincinnati, 18 per cent; Baltimore and Philadelphia, 16 per cent each; Seattle, 13 per cent; Indianapolis, 12 per cent; Providence, 11 per cent; Buffalo, 10 per cent; Chicago and San Francisco, 9 per cent; Minneapolis and Newark, 8 per cent; Pittsburgh, 6 per cent, and Cleveland and St. Paul just holding their own.

The number of deaths under 1 year to every 1.000 living births is estimated at ninety-eight in Milwaukee. The death rate for 1915 in other cities, in order of their rank in population was: Chicago, 102; Philadelphia, 104; St. Louis, 82; Boston, 103; Cleveland, 110; Baltimore, 119; Pittsburgh, 109; Detroit, 104; Buffalo, 108; San Francisco, 70; Cincinnati, 78; Newark. 83; New Orleans, 119; Washington, D. C., 110; Minneapolis, 17; Seattle, 53; Indianapolis, 131; Louisville, 99; Rochester, 83; St. Paul, 77; Denver, 93; Columbus, 78; Toledo, 107.—The Crusader, March, 1916.

It is only since 1870 that the new interest in the lives of infants has been manifest. Together with the growth of the humanitarian idea has been the development of sanitary science and preventive medicine and the great advances in our knowledge of the diseases of children which have made it possible to check, to some degree at least, the enormous infant death rate which had continued almost the same since vital statistics were first kept.—The Crusader, March, 1916.

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L. M. WARFIELD, M. D., Editor 79 Wisconsin Street, Milwaukee

J. P. McMAHON, M. D, Managing Editor

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#### **EDITORIALS**

#### THREE CHEERS.

For the first time we have received a copy of the Bulletin of the Calumet County Medical Society. We hope that we shall be placed on the mailing list. We want this Bulletin to come regularly to cheer us up and to let us know that there are some real live ones in the State. We say bully for Calumet. Congratulations to the Editor, Dr. F. A. Kauf of Kiel. It is such effort as this which will make our State Society the best in the country. Long life and prosperity to Calumet County Medical Society and to its active and energetic Secretary.

#### THE MENACE OF CANCER.

HE menace of cancer has so often been referred to in these columns that no new evidence will be submitted at this time to substantiate the claim.

The problem with regard to cancer is not so much the discovery of new things as it is the distribution of knowledge we have concerning the old. When we come to study the natural history of cancer, it is, after all, quite simple; being in its incipiency a purely local lesion. The wonder is that we could have closed eyes these many years to anything so obvious. Indeed, the sluggishness of our perception in this connection is only explicable on the plea of our habitual bondage to traditional bias. We have been drifting for centuries with the situation regarding cancer becoming more and more complicated. The horrible monster, as it appears full fledged, has so intimidated us that we lose sight of its comparatively innocent beginning, and focus our energies upon devising formidable operations to combat a destructive invasion that ends in defcat. So accustomed have we become to looking at cancer as an incurable malady that little advance has been made in the way of curative treatment. If we would expend anything like as much ingenuity and energy in studying pre-cancer and early cancer conditions as we do trying to frustrate the terminal stages, something worth while would be accomplished.

The classic picture of cancer given in our textbooks is advanced cancer, fatal cancer, and not treatable cancer. We never accomplished much in the treatment of consumption as long as we waited for cough, fever, nightsweats, hemorrhage and percussion flatness before we made a diagnosis.

The fact that no specific cause has been agreed upon to account for malignancy has led to inertia; unmindful of the fact that some of our most striking therapcutic successes have accrued before the real etiologic factor has been apprehended. Witness syphilis and malaria. Watchful waiting for some wonderful discovery should cease. Apply the workable information we now have, and the reduction of the cancer mortality at least 50 per cent could be accomplished. The profession should fully inform itself regarding conditions and lesions that are early cancer or are likely to become such, and impart this knowledge to their patients. This task is perfectly practicable and not difficult of accomplishment.

It has been intimated that the agitation of this subject among the people would frighten many. I will not take time to refute such a charge as it carries no weight in fact. People are struck with terror, because they know that cancer almost certainly means a death sentence, preceded by a period of suffering and pain. Fear of cancer, like the fear of most things, is bred of ignorance and nourished by lack of scientific knowledge. Teach that cancer-danger is largely due to ignorance and procrastination and that it is possible to overcome these conditions; that cancer is comparatively benign and a really curable disease and much of the fear will vanish.

The cancer process goes through a quadrangle of events; 1, a primary focus, a purely local lesion; 2, permeation of tissues immediately associated; 3, invasion of the circulating fluids; 4, remote lesions or metastases. Gct the lesion in stage one and a cure is assured, in stage two a cure can be effected in many cases, but in stages three and four, curative treatment is futile.

I believe the State Medical Society of Wisconsin should appoint a cancer commission, with a member, say, in each congressional district. These men should see to it that at least one public meeting a year, of some prominent medical society in each district, is devoted to a cancer discussion. One meeting a year of the county societies should be given over to such discussion. Each member of the commission should take an active interest in gathering statistics and otherwise furthering the propaganda. The commission, through its chairman, should report their activities and accomplishments to the state society each year.—WILLIAM E. GROUND, M. D., F. A. C. S., Member American Society for the Control of Cancer.

#### THE SCHICK TEST.

In the JOURNAL last month was an account of the results of the Schick test applied by the Health Department of Milwankee. There are some interesting observations made by men elsewhere which seem worthy of note here.

It is generally agreed that about 50% of children between the ages of one and five years are susceptible to diphtheria. The susceptibility de-

creases in progressive 5 year periods until in adult life only about 10% are susceptible.

Heretofore when diphtheria was found in a hospital or institution all children and adults were passively immunized by injecting subcutaneously 500 to 1,000 units of antitoxin. It has long been known that this passive immunity was evanescent. Some thought that it might last for three months. Reinjection subjects the individual to the possibility of anaphylaxis of a mild or severe grade. With the aid of the Schick test we have been able to obtain some definite date on the length of time the passive immunity lasted. Thus it has been found that the Schick test was positive as early as seven days after injection of 1,000 units of antitoxin. The longest period of passive immunity was fortyone days, in other words less than two months. It was thought that if three doses of antitoxin were given at short intervals there might be a cumulative effect and therefore increase noticeably the period of passive immunity. But it was found that this method delayed only a few days the time of a positive Schick reaction.

The most lasting artificial immunity was produced by the injection of a toxin-antitoxin mixture.

"Numcrous interesting observations arose during the course of the work. For example, of the many cases of true clinical diphtheria occurring during the year, all had shown positive skin reactions previously. A few cases with negative reactions showed positive cultures to diphtheria. These at no time developed any clinical manifestations and were therefore considered bacilli carriers. In some cases with doubtful clinical signs diphtheria was in this way ruled out by the presence of a negative reaction."—Zuckeman, New York Med. Jour., Oct. 16, 1915.

This test is undoubtedly one of the most important means thus far discovered of controlling epidemics of diphtheria. It is so simple and so absolutely harmless, requiring only great care in the injection into the skin, not beneath the skin, that it commends itself to all who are in any way connected with schools, hospitals, or institutions, especially those for children. We can see no reason why Visiting School Nurses should not be able to give the test. They should be instructed in the technique. Not the least value of the test is the actual saving in dollars to a community in which diphtheria breaks out. We recommend this ur-

gently to the attention of the country communities and we hope that with this new means at our command, the dread diphtheria may soon be as rare in our State as the plague.

#### RAT BITE FEVER.

Within the past few months three articles by American authors have appeared which deal more or less extensively with a rather unusual form of fever following the bite of a rat. At first glance one might be inclined to look upon the term, Rat-Bite Fever, as an old wives' diagnosis, but the disease is now labeled, classified, and the offending organism captured and tagged.

It seems that this disease has been known in Japan for many years. There are references to it in the older American literature and sporadic references to it in the medical writings of at least three nations of Europe. Since 1910 increasing numbers of cases have been reported, particularly in the British literature.

From an analysis of fifty-two cases in the literature and one of his own, Crohn<sup>1</sup> gives an excellent summary of the symptomatology. Following the bite of the ordinary gray rat the wound heals. If infection has occurred there is an incubation period of about twelve days during which time the patient feels perfectly well. The disease then sets in abruptly with "a chill or repeated chills, malaise, inability to work; the site of the wound begins to swell, and becomes indurated and bluish-red; the lymphatic vessels stand out inflamed and reddened, and the regional lymph-nodes show early inflammatory enlargement. Within a few hours fever is established, usually from 103° to 105° F.; the pulse becomes rapid and small, the patient much prostrated. Marked sweatings, occurring throughout the paroxysm, marks the remittent drops of temperature. The fever, chills or chillness, and local inflammation continue throughout the duration of the paroxysms. After one or two days, a bluish-red raised exanthem appears on the body, sometimes locally in the vicinity of the wound, sometimes universally. This rash lasts as long as the paroxysm and disappears with it. Marked nervous symptoms may occur; the reflexes are increased, hyperesthesia or paresthesia is complained of; pareses may appear; dysphagia, muscle pains, etc., may be prominent. The urine frequently shows the presence of a nephritis, varying from mild to very severe. After a variable duration, varying from four to five days, the paroxysm is terminated by profuse sweating.

"A free interval now occurs during which the patient is exhausted and suffers from general weakness. He is usually unable to leave his bed or to undertake any work. At the end of the free period (from three to five days) the second paroxysm appears, this again being followed by a free interval. This order of alternating paroxysms and periods of release from symptoms continues for a variable period; there may be only one attack, or there may be as many as twenty-six.

"The disease usually exhausts its strength as it progresses; the succeeding paroxysms occur at longer intervals, and are maintained for a shorter time, until finally all active symptoms cease. Throughout the course, and long after it, loss of nutrition is marked; cachexia may be severe, convalescence is prolonged and the patient's natural strength returns but slowly.

"The fatal cases are severe from the onset; the course is a short and stormy one; ncphritis is usually the direct cause of death."

Bites on the face and head seem to be followed by a more severe course than bites on the extremities. Moreover every person bitten does not develop the disease. There are the same factors here which are present in the incidence of every disease.

Certain symptoms stand out prominently; the local swelling and induration of the bitten area, the lymphangitis, the relapsing type of fever, and the peculiar exanthem consisting of bluish-red, erythematous spots, slightly raised, and varying in size from small to large spots 8-10 cm. in diameter.

Only two cases have thus far been autopsied and in the reports of neither case were there detailed findings. Practically nothing is known of the fatal lesions. The regional lymph-nodes show only induration and cdema. Under the microscope sections show hyperplasia and congestion.

Crohn made blood cultures, smears stained with various reagents, smears from an excised gland, but was unable to find any organism.

The similarity of the disease to relapsing fever caused by the spirillum of Obermeyer has spurred

<sup>&</sup>lt;sup>1</sup>Crohn, Burrill B., Rat-Bite Fever, Arch. Int. Med., 1915, XV, 1014.

research workers to look for similar organisms in rat-bite fever.

Blake<sup>2</sup> studied a fatal case which occurred in Boston. The incubation period was two weeks, the course was typical but severe and death occurred fifteen days after admission to hospital. At autopsy there were ulcerative endocarditis of the mitral valve, infarcts in the spleen and kidneys, subacute glomerular and interstitial nephritis. In the necrotic areas of sections from the valve were found masses of long slender bacilli.

Cultures from the blood during life and of the heart's blood after death revealed the presence of "a thin filamentous organism varying greatly in length." The study of this organism leaves no doubt in Blake's mind that it is identical with a streptothrix described in 1914 by Schottmüller and called by him streptothrix muris ratti.

The organism was very slightly pathogenic for rabbits and white rats and did not show increased pathogenicity when passed through a rat. As further proof of the etiological relationship of this streptothrix to rat-bite fever, Blake found that the blood-serum of his patient developed a powerful agglutinin towards it.

Most interesting is the report of Tileston<sup>3</sup> who found thread-like organisms in the blood of his patient at the height of the paroxysm by means of dark-field illumination. He could not find them during the afebrile periods and he did not succeed in cultivating them.

He reports two cases. The second was an abortive one in that there were no definite paroxysms. He could not find any organisms in the blood. The treatment of the disease is thus described by Tileston: "The prophylaxis is simple. Immediate cauterization of the wound either by strong phenol or the actual cautery, has proved a sure preventive. The disease, once established, has not yielded to any form of treatment until recently, when Hata (in 1912) reported eight Japanese cases treated with salvarsan. The results were striking, five out of the eight patients being cured by a single injection. Of the remaining three, one had a single relapse, which subsided spontaneously; a second relapsed and was not followed further; the third,

a child aged 2½ years, was greatly improved but not cured by three injections. The effect was the same whether the drug was administered at the height of the fever or during the stage of apyrexia. My cases bring the total of those treated up to twelve, with cure in ten, or 83%. The dosage is the same as for syphilis."

We have then a definite disease produced as the result of the bite of a rat and caused by the growth in the blood of the *streptothrix muris ratti*. This organism has been found in the blood at the height of the paroxysms by means of dark field illumination and the specific cure for the disease is the intravenous administration of salvarsan.

# SOME MODERN CONCEPTIONS OF ACIDOSIS.

T is a long way from testing the urine for acctone and diacetic acid to the determination of the hydrogen-ion concentration (known in literature by the symbol p H) of the blood. Chemistry has come to the aid of Medicine and today is holding the field against all comers. Even Physiology is relegated to second place or is combined with Chemistry or Pathology in hyphenated terms.

The metabolism problems leading to the production of decreased alkalinity of the blood, in short, adicosis, and the determination of the presence and extent of the decrease in blood alkalinity are being studied from various angles.

One hears much now of the term hydrogen-ion concentration. Modern Physical Chemistry recognizes the hydrogen-ion, which carries a positive electrical charge, as the cause of acidity of fluids. Pure water (H2O) dissociates to form hydrogen and hydroxyl (O H) ions and at 20° C. eontains approximately 1/10,000,000 gram of hydrogen ions to the litre and an equivalent amount of hydroxylions. Pure water is thus 1/10,000,000 N acid (where N signifies "normal" and a normal solution is one eontaining 1 gram of the solute to a liter of water) and 1/10,000,000 N alkali. For convenience the logarithmetic notation 10-7 N is used and this is further abbreviated to the expression pH7. That is to say pH7 is neutrality, the solution represented by these figures is 1/10,-000,000 N acid and alkaline. pH8 signifies 1/1,000,000 N alkali; pH6 signifies 1/1,000,000 N aeid.

<sup>&</sup>lt;sup>2</sup>Blake, F. G., The Etiology of Rat-Bite Fever, Jour. Exper. Med., 1916, XXIII, 39.

<sup>\*</sup>Tileston, Wilder, The Etiology and Treatment of Rat-Bite Fever, Jour. Amer. Med. Assoc., 1916, LXVI, 995.

Now the reaction of the blood has been found to lie between pH7 and pH8, pH7.6 representing the normal. Neutrality, pH7, is found only in uncompensated acidosis and is incompatible with life.

The blood is wonderfully adapted to withstand the decrease in alkalinity due to the production of acid bodies by the metabolism of cells. The actual alkalinity of the blood is due to sodium bicarbonate. But the blood also contains phosphates which are slightly alkaline and slightly acid, so balanced that the pH is not affected.

It has been found that a considerable amount of 1/50 N acid can be added to blood without appreciably changing the pH. Nevertheless, in such conditions there are frequently symptoms of acidosis. Increased alkalinity of the blood is not known to occur under any pathological conditions. Increased acidity, or better, decreased alkalinity, is known to occur in a variety of conditions.

The fact that even with rather elaborate apparatus it is not possible to determine whether or not there is decreased alkalinity in the blood as measured by the pH. has led to the conception of "reserve alkalinity" and the determination of this as the all-important factor. This has also been called the "buffer value" of the blood. It means that if a certain quantity of blood, say 100 cc., is normally capable of taking up a certain amount of 1/50 N acid in order to neutralize it, then if 100 cc. can only take up half the quantity of 1/50 N acid, the reserve alkalinity of the blood is reduced one-half.

Acidosis is the reduction of the reserve alkalinity of the blood. The kind of acid produced makes no difference so far as the symptoms are concerned. Then with the production of acid substances of metabolism constantly going on in the body, what processes has the body normally to combat this ever-present tendency to the production of acidosis? There are various protective mechanisms which the body makes use of to preserve the acid-basc equilibrium of the organism. Such for example are the increased production of ammonia, the excretion of non-volatile acids by the kidneys, and what we have just described as the buffer action of the blood itself. All of these processes may be called into action at once in an attempt to maintain the acid-base balance. In diabetic acidosis. for example, there is an increased production of ammonia, there is increased rapidity and depth of respiration, there is secretion of beta-oxybutyric acid in the urine, and the blood shows increased hydrogen-ion concentration.

It is difficult to keep pace with the rapid advance in the subject. If this brief outline serves to make it more intelligible to the reader of the modern literature, the Editor will feel that he has done a real service.

#### POST GRADUATE WORK.

SOME time ago there was a notice in the Journal that the Milwaukee County Hospital offered facilities for Post Graduate work to the physicians of the state.

Every now and then surprise is expressed by some dector that more use is not made of the largest free hospital in the state. It is a source of wonder. Men go around to various so-called Post Graduate Schools, pay several hundred dollars in fees, and derive more or less benefit. Our own observation satisfies us that much good money is wasted and not a commensurate amount of information is obtained.

Again the invitation is extended to the profession of the state to come to the hospital and make use of the material there. Internal medicine and surgery are the two subjects which the hospital is equipped to teach. The clinics in the specialties are not large and probably would not offer any great advantages for study at present.

It is hoped that during this summer there will be men who will stop in Milwaukee and see what there is to get here. So often opportunities at our own door-step are passed over for chimeras to which distance lends enchantment.

Possibly one cannot gain here in Milwaukee the information one is seeking, but it might be worth while to come and investigate first-hand.

#### PATTEN VS. THE A. M. A.

A T the present writing there is being tried in Chicago one of the most important cases which has been before the Courts for many years. The Pattens, owners of the Chattanooga Medicine Company which manufactures Wine of Cardui, and other Patent Medicines, are sueing the A. M. A. for \$300,000 damages for alleged libelous statements in regard to Wine of Cardui published in the Propaganda for Reform Depart-

ment of the Journal A. M. A. The suit, so it appears to us, is after all the fight of men making their money by duping ill women, against the forces which stand for decency, honesty, and preservation of the lives of women.

We understand that both sides have been preparing for months for this fight. The Pattens, as representatives of the whole order of those who gain their millions by advertising and selling Patent Medicines, are really representing all the Patent Medicine interests. Should this suit go against them, it might well sound the death knell of the whole nefarious Patent Medicine business.

The testimony is voluminous already and the suit is only begun. We have marked one circumstance as the trial has gone on, that is, that not all newspapers contain notices of the progress of the trial. Further, that only those newspapers which have cleaned their pages of objectionable quackmedieine advertisements publish any of the doings at the trial.

It makes us wonder how long we are going to stand the entrance into our homes of the newspaper which carries on every page prominent advertisements of patent medicines and quacks, some of which are disgusting and almost all are false and misleading. From what we see of some first-class newspapers, we are led to believe that they can be and are successful business enterprises in spite of the fact that they refuse the advertisements of quacks and patent medicines. It does not seem necessary for a newspaper's existence that it lend itself as a party to deceive the sick. It does not need the money of those who prey upon the ills of humanity.

This particular trial is important for the public, not for us as physicians and surgeons. Cases of illness which have used Patent Medicines eventually seek our advice in the end, provided they do not die while taking the medicine. The charge thrown at the Medical Profession by the adherents of cults and isms, that our activities against them are due to curtailment of business, is too absurd to notice. We lose nothing, but it makes one boil inside to see patients reach the last stages of some chronic disease after having been for months either taking some Patent Medicine or taking treatment (?) from some quack.

We hope with all the hope that is in us, that Patten loses his suit. We hope the Federal Government will indiet him for misbranding his Wine of Cardui, which on his own admission is not wine.

Should the Patent Medicine interests lose, it will mean that thousands of lives will be saved much suffering and thousands of lives will be prolonged.

#### "DOING OUR BIT."

URING these days when the words, efficiency, preparedness, and conservation of natural resources are, for the people of the United States, becoming of vital significance, it behoves the physician to take stock of his work in order that he may assure himself that he is doing his duty to his Nation in the largest possible degree.

Birth registration in the United States is so incomplete that statistics compiled therefrom are of but limited value. Numerous instances have arisen during the past few months in which it has been difficult for citizens to prove their right to legacies because no record had ever been made of their births.

A survey of the causes of infant death is being conducted in our state and much difficulty is being encountered because of a lack of uniformity in reporting causes of death. To aid in a more accurate classification of causes of death, the department of commerce has issued a physician's Pocket reference. These booklets have been mailed to every practicing physician in the United States.

It is the object of this editorial to urge the registration of every birth, and the registration of every death according to the Standard classification.

May we, of Wisconsin, not prove our true patriotism, as physicians, by doing our share toward the more accurate compilation of our National Health Statistics.

W. E. D.

#### A NEW MOVIE STAR.

The clipping is taken from the *Chicago Herald*. The honorable doctor is not wasting any time in pushing his advertising campaign. He may be a much maligned man and the Chicago Medical Society may have made a great mistake and may have

done an injustice to him. Let every one judge for himself.

## HAISELDEN MOVIE STAR; PLAY LIKE BOLINGER CASE.

FILM DRAMA DEALS WITH PROBLEM OF LETTING DEFECTIVES
DIE OR BECOME PARENTS.

Dr. Harry J. Haiselden, who won fame and was bitterly attacked by medical societies for refraining from an operation to save the life of the defective Bollinger baby, will appear as the star in a moving picture based on his ideas.

The picture, in five or six reels, will portray the turmoil and antagonism arising from letting a defective baby die and the longer, more widespread and, according to Dr. Haiselden, more terrible consequences of letting a defective child live.

The physician will play the leading role, that of the modern doctor. The result will be released in May.

# CIRCULAR LETTER TO FIRST AID COMMITTEE OF NATIONAL AND STATE SOCIETIES— APPOINTED AND TO BE APPOINTED.

February 24, 1916.

The Secretary was authorized by the Conference to make the survey. These National and State Committees have been appointed to assist the Secretary in this investigation.

The Board of Standardization has requested that these First Aid Committees make their report to the Secretary of the Conference.

Reprints have been or will be sent you from the Military Surgeon, Surgery, Gynecology and Obstetrics, for January, 1916, and one soon to be published in the Journal of the American Medical Association. These contributions outline the methods of investigations.

State Committees might confine their attention to a survey of the actual conditions of first aid and accident surgery in the Railroads, Mines, and Industries in their respective States. Attention should be concentrated on a system of bookkeeping and records which will demonstrate the economic value of First Aid instruction and material and improved methods of surgery. The exact period of disability needs thorough study in this country.

Every surgeon interested in this movement can be helpful to the State Committee by co-operation in this investigation.

Officials of Railroads, Mines and Manufacturers should co-operate.

Committees representing National Associations should make a survey of the opinions of their colleagues and if possible standardize the best methods employed in accident surgery.

In many instances First Aid by the layman is not necessary because the injured patient can be readily transported to an accident room or to a hospital. This is especially true in mines and industries, and perhaps in accidents occurring in cities near hospitals.

In some instances First Aid must be performed by the layman and the question is, what shall they be taught, and what material shall be provided and how shall it be distributed?

In other instances, the First treatment of the wound, on account of the environment of the accident, cannot be much more than simple disinfection, dressing and fixation, even if the patient is seen at once by a physician or surgeon.

The object of this survey is to collect the actual facts and provide for improvement of future records so that progress may be more rapid.

Very truly yours,

Joseph C. Bloodgood.

The following advertisement is clipped from the Darlington (Wis.) Republican-Journal:

"A. R. Law, M. D., Specialist in Rectal Diseases. Piles permanently cured without pain or the use of the knife. Office in Washington Bldg., Madison, Wis. Graduate Rush Medical College, Post-Grad. Chicago Polyclinic, Post-Grad. New York Polyclinic, Post-Grad. New York Medical School and Hospital, Matriculate Graduate School of Medicine of Chicago."

"Doctor" (?) Law neglects to name one post-graduate course he took recently. He studied at the Wisconsin State Prison in a "matriculate's" striped uniform as a result of some "post-grad" work along the abortion line. The governor recently restored his license to practice medicine on the petition of friends.

#### ABSTRACT.

Rappaport (Jour. A. M. A., March 25, 1916) reports further on the use of kaolin for removing diphtheria bacilli from the nose and throat. He has studied 100 unselected cases, 96 being diphtheria patients and four pure diphtheria carriers, that is to say, persons in whom the bacilli are recovered from the nose or throat but who have no symptom of diphtheria and who give a negative Schick test. He applies the kaolin as follows: The crude material is thoroughly dried for several days in an oven or incubator, it is then powdered and passed through a fine flour sieve. As the material is very hygroscopic, it must be kept in the oven or incubator. The kaolin should be started as soon as the acute symptoms have subsided. It can be given either as a powder in insufflation into the nasal passages six or eight times a day, or the dry powder can be swallowed in the dose of four half teaspoonfuls at two hour intervals. He says that kaolin is not bactericidal but acts by mechanically removing the bacilli from the mucous membranes. Local pathologic conditions such as in the nose, or enlarged tonsils with deep crypts, should be removed. He feels that this is a distinct advance in the treatment of these diphtheria carriers.

#### THE STATE MEDICAL SOCIETY OF WISCONSIN

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# NEXT ANNUAL SESSION, MADISON, OCTOBER, 1916. The Wisconsin Medical Journal, Official Publication

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#### SOCIETY PROCEEDINGS

#### LA CROSSE COUNTY

Members of the La Crosse County Medical Society on April 27 examined the heart and lungs of all persons desiring such examination, free of charge. This was done to ascertain the physical condition of various persons of limited means. A big meeting was held in the evening, at which Dr. G. R. Ernst, Milwaukee, spoke on Tuberculosis and Preventive Work being carried on in the state. Women's clubs of the city co-operated with the Medical Society in arranging for the examinations, and in conducting the public health meeting in the evening.

#### MARATHON COUNTY

The Marathon County Medical Society held a meeting on May 1st at the Wausau Club. A business session was held followed by a program. Dr. L. M. Warfield, Milwaukee, read a paper on "Blood Pressure in Nephritis and Allied Conditions."

#### MILWAUKEE COUNTY.

Meeting called to order at 8:30 P. M., April 14, 1916. Dr. Franz Pfister in the chair. Minutes of the last meeting read and approved as read. The following were elected to membership: Drs. John T. Sullivan, James W. Frew, R. K. Mitchell, John S. Gordon, F. J. Korthals and W. E. Fox. A communication was read from Dr. W. E. Campbell of Chicago. Motion made by Dr. L. M. Warfield, duly seconded and carried, that this communication be turned over to the committee on Public Policy and Legislation. A communication was read from Dr. O. Lotz, which included an invitation to the members of the society to a special meeting held by the Milwaukee Medical Society.

Dr. L. F. Jermain read a paper on "Rupture of Aortic Aneurysm," with report of case living two weeks after rupture." Discussion by Drs. L. M. Warfield, F. Studley, D. Hopkinson and H. Reineking. Dr. R. G. Sayle read a paper entitled, "Exercise, (a) systemic, general while confined to bed; (b) following fractures, dislocations and trauma." Discussion by Drs. C. M. Echols, A. H. Levings, W. C. F. Witte, and P. F. Rogers. Dr. J. M. Beffel read a paper on "Treatment of Pernicious Anemia with Sodium Cacodylate." Demonstration of Slides." Discussion by Drs. D. Hopkinson, L. M. Warfield, J. J. McGovern, L. F. Jermain and A. J. Caffrey.

This meeting was a joint meeting of the Racine, Waukesha and Milwaukee County Societies. There were 130 present. Daniel Hopkinson, Secretary.

#### NINTH COUNCILOR DISTRICT.

The annual meeting of the Ninth Councillor District Medical Society will be held on May 19 at

Stevens Point. About 65 members are expected to be present. The meetings will be held in the public library. A banquet will be held early in the evening, followed by a scientific session, at which Dr. E. R. LeCount of Cook County Hospital, Chicago, will speak on "Causes of Sudden Death." The committee of arrangements is composed of Drs. E. H. Rogers, F. A. Southwick and W. F. Cowan, Stevens Point.

#### PORTAGE COUNTY

Portage County Medical Society held a meeting on April 11th, at the office of Dr. W. W. Gregory, the president of the society. The small-pox and scarlet fever situations and vaccination were discussed.

#### WISCONSIN SURGICAL ASSOCIATION

The annual convention of the Wisconsin Surgical Association was held at Milwaukee, May 10 and 11, at the Hotel Wisconsin. Clinical sessions were held at the various hospitals. Dr. Gregory Connell, Oshkosh, presided at the meetings. "Preparedness of the Medical Department" was the subject of an address by Dr. James R. Scott, Appleton. Dr. G. V. I. Brown, Milwaukee, spoke on "Surgical Treatment of Pharyngeal Defects due to ill advised Tonsil and Palate Operations."

#### NEWS ITEMS AND PERSONALS

DR. PAUL H. RUPP, Milwaukee, appointed county physician to succeed Dr. A. F. Young, who became superintendent of the Milwaukee County Hospital for the Insane, has been named by Judge Eschweiler as physician of the juvenile court.

Dr. Adam G. White, Milwaukee, is defendant in a \$25,000 mal-practice suit brought by Mrs. Amelia Bear, Milwaukee. In her complaint the plaintiff alleges breach of contract in the performance of an operation for an abdominal ailment.

Drs. A. A. Maurer, W. A. Henke, A. A. Mast and George H. Jameson will form a partnership at La Crosse for the practice of their profession, in the near future.

DR. ERWIN CAREY was in April 24 appointed health officer for the village of Reedsville, defeating Dr. Festerling by a vote of 4 to 3. He has also been reappointed health officer for the town of Maple Grove.

Dr. H. A. SIFTON and the Institution of Protestant Deaconesses are joint defendants in a suit brought by Mary Friedman for \$10,000. The

plaintiff charges that her feet were severely burned while she underwent an operation.

Dr. A. F. Young, superintendent of the Milwaukee Hospital for the Insane, since January 5, has presented his resignation to the county board as house physician of the Detention Home, which office he has held while serving at the hospital for the insane.

Drs. B. T. PHILLIPS and S. C. Mason have opened offices and entered a partnership at Marinette. Dr. Phillips has been located at Marinette since 1871, and Dr. Mason at Hermansville for the past four years.

Dr. F. A. Walters, for four years mayor of Stevens Point, was again elected to that office at a recent election by a majority vote of 582 over his opponent, former Mayor P. H. Cashin.

Dr. Max Bornstein, Milwaukee, is being sued for damages in the sum of \$10,000 in a malpractice suit brought by Jos. Galst, who alleges improper treatment of a fractured leg.

Dr. George A. Senn was elected city physician of De Pere at a meeting of the common council of that city on April 18, 1916.

Dr. U. J. Durner, Milwaukee, who has been working in hospitals in London for several months, has returned to his home.

Dr. J. J. McShane, the retiring health officer of Kenosha and secretary of the Kenosha County Medical Society, was honor guest at a luncheon at the Hotel Maywood, on April 11, given by Kenosha County Medical Society. Dr. McShane left Kenosha to become health officer at Akron, Ohio. He has served Kenosha most acceptably for nearly four years.

A party of physicians will probably go by boat from Chicago to Detroit for the meeting of the American Medical Association in June. If Wisconsin physicians wish to join the party the boat will stop at Milwaukee. For further information address Dr. Franz Pfister, Majestic Bldg., or Dr. Daniel Hopkinson, 1008 Third Street, Milwaukee.

The next meeting of the Wisconsin State Medical Society will be held at Madison, October 4,

5 and 6, 1916. The following committees have been appointed by the Dane County Medical Society: General chairman, Dr. L. R. Head; on laboratory exhibits, C. H. Bunting, chairman, W. F. Lorenz, W. D. Stovall, T. W. Tormey, J. A. Jackson, Jr.; on commercial exhibits, A. G. Sullivan, chairman, H. C. Purcell, Joseph Dean, C. Z. Dwight; on place of meeting, R. H. Jackson, chairman, C. R. Bardeen, L. A. Harper, S. R. Boyce; on banquet, L. R. Head, chairman, Phillip Fox, C. S. Sheldon, F. S. Meade, F. I. Drake; on smoker, H. A. Gilbert, chairman, Walter H. Sheldon, P. R. Fox; ladies' entertainment, M. Suthoff, chairman, Clara Moore, S. G. Vernon.

A second series of operations has been performed on male patients at the Home of Feeble Minded, Chippewa Falls, with the result, it is announced, that all the patients have recovered and that the operations have been beneficial. Up to the present time twenty-five patients have been sterilized. The next series of operations will be made on female patients at the Chippewa Falls institution.

Because of the increase in the cost of labor and materials, Milwaukee will probably have to let new contracts for the reconstruction of Blue Mound Sanatorium, for which bonds in the sum of \$50,000 have been issued.

Four of the ten blank Marquette University diplomas, purloined from the Welch Mfg. Co., Chicago, last year, have been presented in different parts of the country, according to Dr. L. F. Jermain of the medical department of Marquette University. These diplomas, he says, have been fraudulently signed. Operations of a fake diploma trust are said to have been exposed by a grand jury investigation in Chicago, and several persons are under arrest.

The Wausau County Board has appropriated \$20,000 additional for a tuberculosis sanatorium, making the fund available \$50,000. The plans adopted call for room for forty patients, with plans for an addition to accommodate as many more.

For its activity in fighting cancer, Wisconsin is given special distinction by the American Society for the Control of Cancer, in a recent bulletin.

This is one of a small number of states recognized as leaders in the warfare on this scourge through public education. The Wisconsin State Board of Health, says the society, through its press service, and by special articles in its bulletin on What You Should Know About Cancer, has been disseminating trustworthy information and advice about the prevention of this disease, and the hope of cure, which is found in the early recognition of the disease and its prompt and competent treatment.

Plans for building a new hospital for the insane for Milwaukee County, for the accommodation of more than four hundred patients now under treatment in the old institution are under consideration by the board of administration, and a conference has been arranged with the county board for the purpose of discussing finances. The board has taken this action as a result of investigation extending over several months.

The United States Public Health Service has expressed a desire to make an extensive investigation of sanitary conditions in selected Wisconsin communities similar to those conducted in other states. The investigation will result in recommendations for improved health conditions and a program for their enforcement.

Dr. Geo. C. Ruhland, Health Commissioner of Milwaukee, is getting information on a plan by which birth certificates will be issued in Milwaukee. At present the births are simply registered and no certificates are given. Dr. Ruhland believes that the issuance of these certificates will stimulate the reporting of births, as parents will be anxious to secure copies of these documents.

"Baby Week" in Milwaukee was held at the Auditorium, May 15-20. The commercial exhibit was in the main arena. This was conducted to raise money with which to pay the expenses of the campaign. The educational exhibit filled the other halls on the main floor. This exhibit was made up of materials from the Children's Bureau at Washington and from the Census Department, the exhibit of the National Association for the Study and Prevention of Infant Mortality, the American Association for Social Hygiene, the Wisconsin State Health Department, the local

health department, together with exhibits from all of the Milwaukee Social Agencies dealing with the infant problem.

The Friday before, Baby Week's exercises were held in all the public schools, calling the attention of the children to the baby problem. On Sunday, ministers of the city preached along the line of the conservation of baby life. A very extensive advertising campaign was conducted by the publicity committee. First, a non-commercial tag day on Monday, the presentation of pennants to every baby under one year of age in the city. The telephone company sent a special invitation to every subscriber, and also through the long distance telephone invited every subscriber within one hundred miles to visit Babyland. The street railway company gave special invitations to every patron of the car line.

The literary program was divided into conferences in the afternoon at two and four on technical problems, at three o'clock social workers took up their particular fields. From noon until 10:30 demonstrations in the educational exhibit were held. Each evening platform addresses in Plankinton Hall, preceded by a brief entertainment, three nights by the school children, and two nights by other agencies. On Monday night Dr. Mendenhall of Madison and Dr. Geisel of Battle Creek, Mich., spoke. Tuesday night John Spargo, Wednesday night Dr. W. A. Evans, Thursday night Theodore Roosevelt, Saturday night Dr. H. J. Gerstenberger of Cleveland, so that the Baby Week program was full and expressed as clearly as possible what is being done by the nation, state and municipality and by social workers in the interest of the baby.

The United States Public Health Service issues publications on hygiene and sanitation for free distribution; it also maintains a loan library of stereopticon slides.

Commencing with the April issue, the Military Surgeon appears in very greatly enlarged form and improved appearance. It will hereafter be issued practically as a magazine de luxe, and no effort or expense will be spared to bring it to perfection. With the expansion of the military and naval forces and the general interest in greater preparedness for defense, the Military Surgeon

proposes hereafter to appear in a form more worthy of the importance of its special field of usefulness and of the dignity of the strong association which it represents. E. L. Munson, Lt. Col., Med. Corps, U. S. Army, is the sccretary-editor.

The forty-first annual meeting of the American Academy of Medicine will be held at Detroit, Mich., June 9-12. The headquarters of the Academy during its meeting in Detroit will be at the Hotel Statler. This hotel is centrally located and members will find it an excellent place to stay. It is urged that those who are thinking of attending the meeting write for accommodations as soon as possible and make arrangements, as rooms are already being engaged for that time in June.

The American Highway Association has issued a circular letter in which it invites the practical co-operation of the country doctors everywhere in pressing the good roads movement. It says in part, "If each one of their number would enlist in this great practical work and become an active evangelist of this new gospel, the effect would be almost instantaneous, and the office seekers and politicians would flock to the cause like doves to their windows. The time for working the roads with the best results is at hand, and if the country doctors could prevail upon the people in their respective districts to take hold of the subject in earnest the roads would all be improved before the next season begins. It is not meant that the work could be finished in a few short months, but that many of the rough places could be made smooth and that the bottomless pits could be bridged over temporarily at least and until permanent work could be done. That would follow once the people could see for themselves what good roads mean for their personal comfort as well as their industrial profit."

The forty-third annual meeting of the National Conference of Charities and Correction was held at Indianapolis, Ind., May 10-17. It opened with an address by Ernest P. Bicknell of Washington, D. C., on measures adopted by the Red Cross and other agencies in warring countries. Health insurance, venereal diseases, mobilizing against alcoholism, industrial hygiene, medical social work, physical care of school children, research work in public institutions, oral hygiene,

the function of the psychopathic hospital, and the relationships of physical well being to efficiency and to heredity were discussed. Dr. J. N. Hurty of the Indiana State Board of Health was chairman on the division on health, and speakers were drawn from all parts of the country. The organization brought together about 2,500 men and women engaged in practical social work, voluntary and public, in the United States and Canada.

The twelfth annual meeting of the National Association for the Study and Prevention of Tuberculosis was held at Washington, D. C., May 11 and 12. All sessions were held at the New Willard Hotel. The program follows: "The Separation of Tuberculosis from General Medicine," Dr. Thomas McCrae, Philadelphia; "The Relation of the General Hospital to Tuberculosis," Dr. Geo. Dock, St. Louis; "The Education of the Medical Student in Tuberculosis," Dr. W. S. Thayer, Baltimore; "Hemoptysis as a Symptom," Dr. Frederick T. Lord, Boston; "Pulmonary Tuberculosis Often of Secondary Importance to other Pathological Conditions," Dr. Chas. D. Parfitt, Gravenhurst, Ont.; "Results Obtained by the Class Method of Home Treatment in Pulmonary Tuberculosis During a Period of Ten Years," Dr. Jos. H. Pratt, Boston, Mass.; "The Early Diagnosis of Pulmonary Tuberculosis by X-Ray, The Clinical Aspect, Dr. Chas. L. Minor, Asheville, The Roentgenological Aspect," Dr. Frederick H. Other speakers were: Drs. Louis V. Hamman, Baltimore; Dr. David R. Lyman, Wallingford, Conn.; Dr. H. J. Corper, Chicago; Dr. S. A. Petroff, Saranac Lake, N. Y.; Dr. Wm. H. Stockwell, Shelton, Conn.; Dr. Myer-Solis-Cohen, Philadelphia, and Dr. Edward R. Baldwin, Saranac Lake, N. Y.

Boards will be convened at the Bureau of Public Health Service, 3 "B" Street, S. E., Washington, D. C., and at a number of the Marine Hospitals of the service, on Wednesday, May 31, 1916, at 10 o'clock, for the purpose of examining candidates for admission to the grade of Assistant Surgeon in the Public Health Service. Candidates must be between 23 and 32 years of age, a graduate of a reputable medical college, and must have had one year's hospital experience or two years' professional work. Examinations are chiefly in writing, and cover the various branches of medicine, surgery and hygiene. Assistant

Surgeons receive \$2,000, passed assistant surgeons \$2,400, surgeons \$3,000, senior surgeons \$3,500 and assistant surgeon generals \$4,000 a year. The tenure of office is permanent. Officers traveling under orders are allowed actual expenses. For invitations to appear before the board of examiners address, "Surgeon General, Public Health Service, Washington. D. C."

The Surgeon-General of the Navy, Rear Admiral Wm. V. Braisted, in an address before the graduating class of the Navy Medical School, reviewed the work of the present administration of the Navy Department in so far as it affected the Medical Corps of the Navy. He said in part: "During the past year the present secretary of the Navy has recommended to Congress the increase of the Medical Corps from 347 to nearly 500, the first increase in twenty years, and most urgently needed; he has established two of the finest Hospital Corps Training Schools in the world for the training of male nurses, made provision for the increase in this Corps by nearly 11,000 men, and has also provided a chance for this Corps to reach commissioned rank; he has made provision for a new hospital ship for the Navy, which will enable us to build the first ship of this kind, designed especially for this purpose. This one effort will, if granted by Congress, be of inestimable value to the Navy and to all other countries. It will provide our fleet and our service with a floating hospital; he has established schools for the training of the native women in Samoa and Guam in nursing that already are giving most excellent results; he has permitted us to take an active part in the regeneration of Haiti, by furnishing medical officers and nurses to care for the sanitary needs of the great work there; he has already supplied, and gradually will furnish our deficiencies in the many large hospital and medical organizations on shore, such as contagious units at Mare Island, Puget Sound, New York and Newport; that we may not be unprovided in emergencies he has authorized our efforts with the Red Cross, and we are now beginning the organization of five Red Cross Hospital units; he has authorized a Medical Reserve Corps of the best medical talent that our country can furnish, and to prepare this group is initiating a correspondence course that shall give these officers a training and working knowledge of their work when called upon.

#### MARRIAGES

Dr. T. D. Smith, Neenah, and Miss Frederica Krueger, New York, April 24th.

#### REMOVALS

Dr. J. M. Williams, Oshkosh to Alhambra, Cal.

Dr. E. F. McGrath, Wrightstown to Appleton.

Dr. L. J. Friend, Milwaukee to Merrill.

Dr. H. F. Goggins, Tigerton to Wrightstown.

Dr. A. I. Lovell, formerly of Madison and Chicago, is now located at College View, Nebraska.

#### **DEATHS**

Dr. Charles A. DeDiemar, Milwaukee, died on April 6, 1916, aged 65 years, following a short illness of pneumonia. Dr. DeDiemar was a native of the town of Somers, Wisconsin, and had practiced there up to twelve years ago, when he removed to Milwaukee.

Dr. E. F. Williams, Bay Settlement, near Green Bay, died suddenly on April 15th while driving his automobile. Dr. Williams was 59 years old. He was graduated from the Catholic University, at Lovain, Belgium, in 1879.

Dr. J. H. Gibson, for fifteen years located at Green Bay, died after a short illness of dropsy on April 6, 1916, aged 65 years. Dr. Gibson was born in Brown County, and had resided there continuously up to the time of his death. He was graduated from the Baltimore Medical College in 1893.

Dr. Adolph G. Beyer, Milwaukee, died after a year's illness, aged 47 years. Dr. Beyer was born in Dresden, Saxony, receiving his education at the University of Dresden. His medical education was obtained at Marquette University, Milwaukee, from which institution he graduatel in 1909.

Sugar is a desirable part of the young child's diet provided it is given in simple sweets, and not allowed to take the place of other foods and spoil the child's appetite. Simple sweets are such things as lump sugar, maple sugar, sirups, honey, and plain candy, and those foods in which sugar is combined in simple forms with fruit juices (in lemonade, water ice, jelly, etc.), with flour or starch, as in plain cakes (cup cake, sponge cake, cookies), and with fruit, as in jams, marmalades, and similar things.—Bull. U. S. Dept. of Agriculture.

#### MEDICO-LEGAL.

## DEATH FROM TYPHOID FEVER FROM DRINKING POLLUTED WATER ACCIDENTAL.

(Vennen vs. New Dells Lumber Co. (Wis.), 154 N. W. R. 640.)

The Supreme Court of Wisconsin holds that the facts pleaded showed that the death from typhoid fever of an employee of the defendant, named Vennen, was caused by accident while performing service growing out of an incidental to his employment. The court says that the defendant was engaged in operating a manufacturing lumber establishment located on the Chippewa River, in the city of Eau Claire. In connection with its establishment it maintained an outhouse and two toilets for its employees working there and a toilet in its principal office building. All of the sewage from these toilets was discharged into the river near the defendant's establishment. The pleadings alleged that the defendant, in supplying water for its boilers, not only secured water from the city water works, but also used water from the river, which was obtained by means of intake pipes; that it was negligent in placing its intake pipes in such location that they carried into the boilers water that was contaminated by the sewage; and that this water, through the defendant's negligence, became mixed with the water from the city waterworks, because of improper connecting pipes. It was further alleged that the defendant negligently permitted and caused the employees to drink of this polluted water, and thereby caused the said Vennen to become sick from typhoid fever, which resulted in his death. The facts alleged showed that the parties to the action were subject to the workmen's compensation act. The inquiry then was: Was Vennen's death proximately caused by accident while he was "performing services growing out of and incidental to his employment?" The inference from the alleged facts was reasonably clear that at the time of the alleged injury resulting in his death he was "performing services growing out of and incidental to his employment." The contention that an injury resulting from carelessness or negligence is not one that can be said to have been accidentally sustained in the sense of the compensation act was not well founded. In the popular sense the words as used in the compensation act referring to a personal injury accidentally sustained by an employee while performing services growing out of and incidental to his employment include all accidental injuries, whether happening through negligence or otherwise, except those intentionally self-inflicted. The term "accidental," as used in compensation laws, denotes something unusual, unexpected, and undesigned. The nature of it implies that there was an external act or occurrence which caused the personal injury or death of the employee. It contemplates an event not within one's foresight and expectation resulting in a mishap causing injury to the employee. Such an occurrence may be due to purely accidental causes, or it may be due to oversight and negligence. The fact that Vennen became afflicted with typhoid fever while in the defendant's service would not

in the sense of the statute constitute a charge that he sustained an accidental injury, but the allegations went further and stated that this typhoid affliction was attributable to the undesigned and unexpected occurrence of bacteria in the drinking water furnished him by the defendant, as an incident to his employment. These facts and circumstances clearly charged that Vennen's sickness was the result of an unintended and unexpected mishap incident to his employment. These allegations fulfilled the requirements of the statute that the drinking of the polluted water by Vennen was an accidental occurrence, while he was "performing services growing out of and incidental to his employment." It was alleged that the consequences of this alleged accident resulted in afflicting Vennen with typhoid disease, which caused his death. Diseases caused by accident to employees while performing services growing out of and incidental to their employment are injuries within the contemplation of the workmen's compensation act .- Jour A. M. A., March 25, 1916.

#### **BOOK REVIEWS**

PRACTICAL CYSTOSCOPY AND THE DIAGNOSIS OF SUR-GICAL DISEASES OF THE KIDNEYS AND URINARY BLADDER. By Paul M. Pilcher, M. D., Consulting Surgeon to the Eastern Long Island Hospital. Second Edition Thoronghly Revised and Enlarged. Octavo of 504 pages, with 299 illustrations, 29 in colors. Philadelphia and London: W. B. Saunders Company, 1915. Cloth, \$6.00 net; Half Morocco, \$7.50.

Dr. Pilcher's book is a distinct credit to American Urology and could be read with great benefit by general practitioners and by general surgeons, not that by so doing they would become competent cystoscopists, for merely reading any book on this subject does not quality one to do this work, but reading such a book does much to clarify the haze which in the minds of very many physicians surrounds surgical diseases of the kidneys and urinary bladder.

The work admirably fulfils the purposes for which it was written, but few adverse criticisms, and these are minor ones, can be made.

In using the Indigo-carmine test, intravenous injections are preferable to intramuscular ones, the latter being decidedly painful on account of the quantity of solution used. In discussing the Phthalein test, the author states that it is not influenced by chronic interstitial nephritis and this is a misstatement. Early hemorrhage in renal tuberculosis is probably oftener due to ulceration of a papilla rather than to ulceration in the renal pelvis. The endo-vesical removal of bits of tissue for purposes of diagnosis is condemned as dangerous and unnecessary it is, however, a current practice.

In using the high frequency current through the operating cystoscope, one important direction is omitted, the source of light should not be the same as the source of the high frequency current.

DISEASES OF THE RETINA. Leber, Th., Heidelberg. Graefe-Saemisch-Hess, Handbuch der gesamten Augenheilkunde, second, entirely new, edition. Nos. 248 to 254, p. 748 to p. 1330, with numerous illustrations. Leipzig. Wilhelm Engelmann. 1915. 14M. \$3.50.

Concluding the chapter on tuberculous affections of the retina, the author says that in not too far advanced cases satisfactory results may be attained by careful cures with new tuberculin. Then the affections of the retina in leprosy and the inflammations and degenerative processes of the retina in diseases of other organs and general disorders are discussed, of which those in diseases of the kidneys occupy 143 pages.

Since albuminuria in itself has nothing to do with the retinitis and not every retinitis in which albuminuria occurs, is caused by nephritis, L. considers it more correct to speak of nephritis, instead of albuminuric, retinitis. First the ophthalmoscopic changes of the three stages, of hyperemia and inflammation, infiltration, fatty degeneration and retrogression and atrophy are presented with illustrations. The radial arrangement of the white spots is not sufficiently explained, but may be caused by the anatomical structure of the retina. They consist of accumulations of granular fat cells in the external layers of the retina, which may also ophthalmoscopically be recognized by the blood-vessels coursing over them.

Then the visual disturbances, special forms of the disease, e.g., hemorrhagic form, papillitis, the anatomico-pathological changes of the retina with numerous illustrations, alterations of the blood vessels and the chorioid, course and termination, complications, uremic attacks, detachment of the retina, secondary glaucoma, occurrence in different types of the renal disease, frequency, etc., are discussed.

In the very interesting chapter on pathogenesis, L. assumes with great probability that retinitis occurs only if the disturbance of the renal function has led to ircreased arterial pressure and hypertrophy of the left ventricle and if in consequence of renal insufficiency regressive products of metabolism are retained. While he admits that the uremic phenomena may be explained by increased pressure of the cerebrospinal fluid, he thinks that Cushing and Bordley go too far by extending such an explanation also to albuminuric retinitis. The great difference of the typical clinical aspect from that of choked disc and the complete lack of characteristic cerebral symptoms in the majority of cases decidedly indicate a different origin. From discussing these points L. concludes that the assumption of peculiar disturbances of circulation suffices for the explanation of the phenomena and shows how the process may be interpreted.

With similar thoroughness the affections of the retina in diabetes, leukemia and pseudoleukemia, intense anemia and chlorosis, diseases of the liver, gout, and oxaluria, are treated, then the local diseases of the retina, which cannot be attributed to ectogenous or endogenous infection or any other disease of the body: diffuse chronic retinitis, adhesive chorioretinitis and external retinitis, pigment degeneration of the retina and

related affections, family amaurotic idiocy, retinitis circinata, retinitis exudative, and pseudonephritic affections.

As we mentioned in our reviews of the preceding instalments also here numerous clinical histories of cases observed by the author and from literature are interwoven in the text of this admirable exhaustive work, and very complete bibliographies are added to the different chapters.

C. Z.

VENEREAL DISEASES. A Manual for Students and Practitioners. By James R. Hayden, M. D., F. A. C. S., Professor of Urology at the College of Physicians and Surgeons, Columbia University, New York; Visiting Genito-Urinary Surgeon to Bellevue Hospital; Consulting Genito-Urinary Surgeon to St. Joseph's Hospital, Yonkers, New York. 12mo., 365 pages, with 133 illustrations. Cloth, \$2.50 net. Lea & Febiger, Publishers, Philadelphia and New York, 1916.

Although the author has epitomised with much discernment, it is manifestly impossible to adequately describe Venereal Diseases in 365 small pages and this is the reviewer's chief criticism of this manual.

Delaying injections in acute anterior gonorrhoea till the declining stage and then using astringents rather than antiseptics while not in harmony with present day teaching is in a large measure, counter-balanced by the very free use of hot water which the author advises in the earlier stages of the disease.

Anti-gonococcic or anti-meningitic sera for acute gonorrhoeal epididymitis are not mentioned, nor is Belfield's injection of the seminal vesicle mentioned in chronic inflammation of this structure. Ruggles' hot air treatment for chancroids, which shortens the average duration of these ulcers about 40 per cent, is omitted.

The chapters on syphilis are too meagre to enable one by reading them to learn much of this disease and the brief paragraph on the Wassermann reaction conveys an entirely erroneous idea of its uses and value.

A Manual of the Practice of Medicine. By A. A. Stevens, A. M., M. D., Professor of Therapeutics and Clinical Medicine in the Woman's Medical College of Pennsylvania. Lecturer on Medicine in the University of Pennsylvania. Tenth Edition, Revised. 12mo of 629 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1915. Flexible Leather, \$2.50 net.

Of all the attempts which have been made to produce a condensed work on the Practice of Medicine, a really dependable volume of small compass upon so vast a subject, that of Professor Stevens as the most satisfactory which has come to the reviewer's attention. Everything that is contained in this small volume is thoroughly trustworthy, and the student must be an ingenious one who can think of anything to look for which is not to be found between its covers.

Professor Stevens has the gift of being able to paint the portrait of a disease with a few clean cut paragraphs so that in this work we have clearness and well-defined differentiation as well as condensation. A. W. M. Next Meeting, Milwaukee, October 6-8, 1915

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Owned and Published by the State Medical Society of Wisconsin

A. W. MYERS, M. D., Editor
J. P. McMAHON, M. D., Managing Editor

VOLUME XIV.

MILWAUKEE, WIS., JUNE, 1915.

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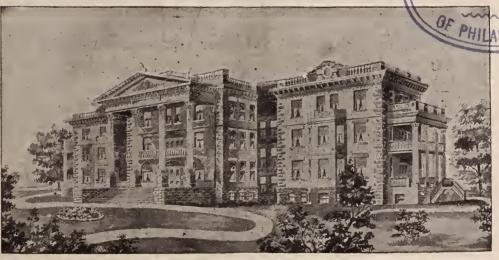
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### Next Meeting, Milwaukee, October 6-8, 1915

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A. W. MYERS, M. D., Editor
J. P. McMAHON, M. D., Managing Editor

VOLUME XIV. NUMBER 4.

MILWAUKEE, WIS., SEPTEMBER, 1915.

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Consult your Druggist. He can obtain State Board of Health products for you.

For further information write DR. C. A. HARPER, State Health Officer, Madison, or

#### Dr. H. M. Alexander & Co.

Biologic Laboratories
Marietta, Pa.

OCONOMOWOC, WISCONSIN.

Built and Equipped for the Scientific Treatment of

#### **NERVOUS DISEASES**

BUILDING ABSOLUTELY FIRE PROOF



New, Isolated, Fireproof Psychopathic Department for Acute Mental Cases.

Trains met at OCONOMOWOC on request.

ARTHUR W. ROGERS, M.D.

Owned and Published by the State Medical Society of Wisconsin

L. M. WARFIELD, M. D., Editor J. P. McMAHON, M. D., Managing Editor

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[Entered as second class matter, June 30th, 1903, at the Post Office at Milwaukee. Wis.. under Act of Congress
March 3rd, 1879.]

### Waukesha Springs Sanitarium

FOR NERVOUS DISEASES.



BUILDING ABSOLUTELY FIRE-PROOF.

Byron M. Caples, M. D., Superintendent

# Germicidal

# Soap

(Formula of Dr. Chas. T. McClintock)

#### Powerful antiseptic, disinfectant, detergent and deodorant.

Prepared from pure vegetable oils combined with mercuric iodide, the most powerful germicide known.

Does not attack nickeled or steel instruments; does not coagulate albumin.

#### GERMICIDAL SOAP, 2%:

Contains 2 % of mercuric iodide: large cakes, one in a carton.

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Large cakes, one in a carton; small cakes, five in a carton.

For other forms see our catalogue.

#### SUGGESTIONS FOR USE

To prepare antiseptic solutions.

To sterilize hands, instruments and sites of operation.

To cleanse wounds (bruises, cuts, abrasions), ulcers, etc.

To lubricate sounds and specula.

To destroy infecting organisms in skin diseases (ringworm, acne, barber's itch, etc.).

To disinfect surface lesions associated with fetid discharge.

To control the itching of skin infections.

To disinfect the hands after attendance upon cases of communicable disease.

To make solutions for the vaginal douche.

To destroy the odors of offensive hyperidrosis.

To cleanse the hair and scalp.

To remove and prevent dandruff.

To disinfect vessels, utensils, etc.

To wash and sterilize bed-linen, handkerchiefs, etc., used in the sick-room.

Germicidal Soap, in short, is useful whenever and wherever a powerful antiseptic, disinfectant, detergent or deodorant is required.

SPECIFY "P. D. & CO." WHEN ORDERING FROM YOUR DRUGGIST.

Home Offices and Laboratories, Detroit, Michigan.



EQUIPPED for the accommodation of a limited number of patients, who need care and treatment away from home, but who do not wish, or can not afford to go to the large sanitariums.

The building is solid brick. three stories, heated by steam. lighted by electricity, and surrounded by a grove of beautiful trees, just at the west city limits. Open throughout the year. When notified, patients will be met at the depot.

FOR FURTHER PARTICULARS ADDRESS

S. B. ACKLEY, M. D., SUPERINTENDENT
OCONOMOWOC, WIS.

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Next Meeting of the State Medical Society at Madison October, 4th, 5th and 6th, 1916

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L. M. WARFIELD, M. D., Editor
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